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EDITORIALLY SPEAKING

JOB ANALYSIS AND AFTER

The technique of analysis of the activities characteristic of a given occupation is undoubtedly applicable to the work of teaching, supervision, and management of schools. What the teacher or educator actually does may be observed and recorded and the records obtained may be subjected to statistical treatment. In this way frequencies may be determined and a factual basis laid for the training of candidates for educational positions.

Two cautions, however, must be observed. The first is that questionnaires must always be checked by means of more objective evidence. The sending out of questions is so workable and inexpensive a procedure that the temptation to employ this method seems to be well-nigh irresistible. Through this short-cut a study can be made in a fraction of the time and with only a small portion of the expense that would be involved in actual observation and recorded interview. Nevertheless the answers to questionnaires have been found inaccurate over and over again. Some graduate student will perform a real service by finding out what the average inaccuracy in certain selected fields actually is. There is no doubt that it is very large. Hence the facts obtained by means of questions handed out or sent by mail should never be depended upon as unsupported evidence. Many scientific investigations will move more slowly than they would otherwise in consequence of observing this principle, but they will move more surely.

The second caution runs to the effect that what is done must not be accepted as representing what ought to be done. Scientific studies in industry arose from a desire to improve the behavior processes of the workers. Thus photographs of bricklayers in action were taken and afterward examined with a view to discovering waste and substituting economy. More recent studies in other fields, such as merchandising, have seemed at times to depart from this earlier purpose and have in view only to ascertain what is actually done and train for that.

The application of such a point of view to education at this time would be peculiarly unfortunate. The actual practices of the schools, particularly those of the elementary schools, are rapidly changing. The notion of what education consists in and the part which teachers and

pupils should play in it is not the same today that it was yesterday nor the same that it will be tomorrow. We must learn not only what teachers and other educational workers actually do but also what they should do. The latter is by far the more difficult task. Its consummation will depend in part, moreover, upon the use of some such technique as that now commonly referred to as job analysis. As a step toward the ultimate goal, the making of a job analysis of a certain phase of education is a most praiseworthy enterprise. All phases should be reviewed in this manner as soon as possible. Meanwhile, let endeavor to discover better methods of procedure be redoubled. Without such endeavor effective training for teaching may conceivably become merely the certain perpetuation of present practices.

A BALANCED PROGRAM

Principals of elementary schools will find in their Bibles some much needed admonition and advice. Just now the verse, "This ought ye to do and not to leave the other undone," is particularly in point. On the one hand principals are urged to give their time to supervision. Nothing counts but teaching. Energy spent on office work is pure waste. Let the principal attend to the improvement of instruction; other aspects of the school do not matter.

On the other hand are those who believe that the principal should be an administrator and nothing else. Supervision of teaching he should leave to the specialists who are attached to the superintendent's office. One person can not hope to deal with so many and so varied issues as arise in a modern school. This is the era of specialization. Let the principal strive to become a good manager. This is all that he can compass.

Without doubt principals must delegate many responsibilities. Those who now have clerks or assistants for the first time must learn to do this. A definite policy as to the delegation of responsibility is much needed and should be worked out. But the principal should retain the oversight and direction of all the features of the life of his school. Good supervision waits on good administration and good organization is necessary to both. The principal should strive to be an all-round man, effective in the leadership of his social group, the teachers and pupils of the school. Instead of turning wholly to supervision or to administration, he will coördinate the two. He will seek to develop and carry forward a balanced program.

THE EFFECT OF A SINGLE READING VERSUS TWO READINGS OF A GIVEN BODY OF MATERIAL

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THE PROBLEM

It is a matter of importance to know the relative effectiveness of a single reading at normal rate and two readings at normal rate of a given assignment. One reading at normal rate may be considered as the type of reading procedure employed by many students when they are given a reasonable amount of time in which to complete a relatively large reading assignment. If the average student has one week in which to read 200 pages of supplementary reading, it may reasonably be assumed that he will devote a single reading to the assignment. On the other hand, if the average student has one week in which to read 16 pages on the same topic, it is highly probable that he will read the material two or more times. Since there are reasons for concluding that students employ one type of reading procedure for extensive or supplementary assignments and another type for intensive or textbook assignments, it is desirable to know which method is more effective in terms of the range and accuracy of the information gained from the reading.

METHOD OF PROCEDURE

The conditions of the experiment required that one group of students devote a single reading to a given assignment, while another group of equal ability devoted two readings to the same material. Class groups in Education, at the University of Chicago, and in social science at the University High School, University of Chicago, participated in the investigation. The scores on the Otis Self-Administering Tests of Mental Ability were used as a basis for selecting parallel groups, each pair of which possessed approximately the same average mental ability. It seems that intelligence is the most important single factor in determining the comprehension of material read by students at the same academic level. In a recent summary of investigations relating to reading, Gray[1] makes the following statements:

> With very few exceptions, the studies . . . show a greater or less degree of positive correlation between general intelligence and reading achievement. . . .
>
> The studies . . . show clearly that progress in reading depends to a considerable extent on the level of intelligence of the learner.

SELECTION OF SUBJECT MATTER

Two factors influenced the selection of material for the reading assignments. It seemed desirable to select reading material which was adaptable to students at the secondary school level, as well as to junior college students. Another consideration was the necessity of choosing subject matter with which the students were not too familiar from their background of previous experience and upon which rather exacting information questions could be based.

After considerable examination of history and civics texts, it was decided to

[1] William Scott Gray, *Summary of Investigations Relating to Reading*, pp. 48, 51. Supplementary Educational Monographs, No. 28. Department of Education, University of Chicago, 1925.

select material from community civics texts by Hill, Howe, and Dunn. Such material lent itself to the formulation of rather exacting information questions and it did not seem probable that college students had been recently in contact with the subject matter. The high school students were not engaged in studying such material at the time of the experiment, although it is possible they may have been more familiar with the subject matter than were the college students. At any rate, the parallel high school groups were equally well prepared in social science. The extracts from the civics texts were reworded and adapted for the purposes of this experiment. Sometimes the discussions of two or three authors were combined to furnish the reading material for a given test. Reading material for two tests was selected on the topics, "Customs Duties" and the "Boycott." The titles of the tests indicate to a certain extent the nature of the subject matter which makes up the reading material of the tests.

CONSTRUCTION OF THE TESTS

The questions based on the reading material are of the multiple choice type and of the completion type. These types were selected because of the objectivity of the scoring which they permit, and because of the manner in which they lend themselves to the information question. The multiple choice question requires only that the correct answer be checked; the completion question requires a short written answer or a listing of points. In general, such questions permit accurate scoring, require a minimum of writing, and demand rather exacting mastery of the information included in the reading material.

The tests were administered to a number of students in the College of Education in order to obtain tentative time norms. Upon the basis of results from the preliminary tests, two minutes for a single reading, four minutes for two readings, and seven minutes for the questions seemed ample for all individuals. All of the subjects (about ten) finished the tests within the specified time limits. Such proved to be the case when the test was given to the class groups. However, the students proceeded at their own rates throughout the test with no restrictions except that the two groups finish within the liberal time limit of 10 and 12 minutes respectively. As soon as a student finished, his paper was collected in order to prevent a possible prolongation of his work on the test in the remaining time. The aim was to have each individual work at his normal rate. This procedure was for the particular benefit of the group which read the material a single time, as they were supposed to finish about two minutes earlier than the other group.

The directions, reading material, and questions for the "Customs Duties" test are reproduced below. The construction of the "Boycott" test is similar in every respect to the plan followed in constructing the "Customs Duties" test. Two tests were constructed and administered in order that the parallel groups might reverse their reading procedures on the second test as a check on the accuracy of the results secured from the first test. Thus, the group which devoted a single reading to "Customs Duties" devoted two readings to the "Boycott" material; the parallel group employed just the opposite procedure.

DIRECTIONS FOR "CUSTOMS DUTIES" TEST

Group A (One reading)

Please leave the test face down until told to begin. You should have two pages in the material handed you. When told to begin you are to read through the first page *one time* at your normal rate. None of you should need more than 2 minutes to read the first page. As soon as you have finished reading the first page,

fold it back and answer the questions on the second page. Do not refer to the reading material after beginning work on the questions. When you have finished the questions fold your paper lengthwise, write your name and group on the outside, raise your hand, and the paper will be collected at once. Please use a pencil if convenient.

Do not remove the clip from the paper if you can avoid doing so. You should not need more than 7 minutes to answer the questions and your papers will be called in at the end of 10 minutes.

Group B (Two readings)

(Directions are the same for Group B except that they are to read the first page *twice* at normal rate. The above directions may be read to both groups at the same time providing the instructor stops at the proper places and differentiates the procedures for the two groups. The points of differentiation are: Group B should complete two readings in 4 minutes or less, should finish the questions within 7 minutes, and should not use more than a total of 12 minutes for both parts.)

Customs Duties

One of the chief duties of the Treasury Department is to collect the customs duties levied by Congress on imported goods. These duties laid on imports from foreign countries are paid to Collectors of Customs who work under the Treasury Department. At every regular port of entry for foreign goods a collector or deputy collector is stationed. The main ports are about fifty in number. The salaries of the collectors in charge are regulated by the amount of business done.

The primary purpose of the customs duties is to provide a revenue for the government. They have been used, however, to protect home industries against the competition of foreign industries. This is accomplished by making the tax upon imports so high that the prices of these goods are raised above those of goods of home manufacture. Like the question of the national bank the question of protective duties has been hotly debated in political campaigns, many believing that duties on imports should be "for revenue only," while others believe that American industry should be protected by them. There is an intermediate opinion that protective duties are justified in the case of "infant industries," *i.e.*, industries that are struggling to establish themselves; but that they are not justified in the case of industries already well established and able to compete on equal terms with similar foreign industries.

In order to escape the customs duties many people when returning from abroad smuggle articles into this country. Such things as diamonds, jewels, fine laces, etc., are not bulky and may sometimes be hidden to escape the sharp eyes of the customs officials. To prevent smuggling of valuable articles into this country the baggage of all returning tourists and of all other people is searched on entering this country.

Name .....
Group .....
Times Article Read .....
(Circle, check or otherwise indicate correct answer.)

1. This Article Says That the Duty of the Treasury Department is
   a. to print the paper money of the country
   b. to carry out the laws passed by Congress
   c. to collect duties on imported goods
   d. to provide a revenue for the government
2. The Main Ports of Entry Into This Country are in Number About
   a. thirty
   b. forty
   c. fifty
   d. sixty
3. The Salaries of Collectors of Customs Are
   a. very large
   b. regulated by the amount of business done
   c. fixed by the Treasury Department when they take office
   d. determined according to the laws made by Congress
4. The Chief Purpose of Customs Duties is
   a. to keep foreigners out of this country
   b. to make America a better place to live in

c. to protect home industries against foreign competition
d. to provide revenue for the government

5. THIS ARTICLE SAYS THAT PROTECTIVE DUTIES
a. have been hotly debated in political campaigns
b. have caused the Treasury Department much trouble in collection
c. cause foreign countries to dislike us
d. cause the laborer to get better wages

6. AN INTERMEDIATE OPINION REGARDING PROTECTIVE DUTIES IS THAT
a. they should be abolished
b. they make us pay high prices for our goods
c. they should be raised as high as possible
d. they are justified only in the case of young industries

7. TO PREVENT TOURISTS AND OTHERS FROM SMUGGLING VALUABLE ARTICLES
a. they are not allowed to bring diamonds into this country
b. their baggage is searched
c. the guilty people are fined
d. the duty is made very high

8. To whom are duties on foreign goods paid? .....

9. How do duties protect home industries? .....

10. In addition to protective duties what other question has been an issue in political campaigns? .....

11. What are the various opinions regarding the purpose of duties? .....

12. What is an intermediate opinion regarding protective duties? .....
.....

13. What things does the article say may be smuggled occasionally? .....
.....

SCORING

The point system of scoring was used in the experiment. Such a system permits objectivity and uniformity of scoring and ready mathematical manipulation of the scores. One point was allowed for each correct answer or for each correct item when a question required a listing of items by way of answer. Table I illustrates the method used in scoring the "Customs Duties" test. The scoring of the "Boycott" test was similar.

TABLE I—METHOD OF SCORING THE "CUSTOMS DUTIES" TEST

Question	Maximum points	Correct answer
1	1	c
2	1	c
3	1	b
4	1	d
5	1	a
6	1	d
7	1	b
8	1	Collectors of Customs.
9	1	Price of foreign goods is raised by a tax above the price of home goods.
10	1	National bank.
11	3	Revenue, protection of industry, protection of industry only.
12	1	Protection of infant industries only.
13	3	Diamonds, jewels, fine laces.
	17	

RESULTS

Table II presents the data secured from the "Customs Duties" test. Table III shows the results secured from the "Boycott" test.

TABLE II—SCORES OF CERTAIN PARALLEL GROUPS ON THE "CUSTOMS DUTIES" TEST

One reading	Two readings
13.7	14.3
13.4	13.8
10.9	12.0
9.8	11.7
12.2	13.8
12.5	14.6

TABLE III—SCORES OF CERTAIN PARALLEL GROUPS ON THE "BOYCOTT" TEST

One reading	Two readings
14.9	14.9
12.3	15.7
13.7	12.9
13.5	16.1
14.6	14.9

INTERPRETATION OF RESULTS AND APPLICATION TO SCHOOL PROCEDURE

An examination of Table II and Table III shows that, on the whole, two readings of a given body of material are more effective than a single reading of the same assignment. However, the superiority of two readings is not so marked as to validate the exclusive use of such a procedure for all reading and school purposes. It is possible that had the reading material been longer and more difficult, the superiority of the rereading procedure might have been more pronounced. Likewise a reproduction test might have given results which indicated the superiority of rereading for purposes of verbatim reproduction of the ideas and material of the test. If a second reading of the social science material is only one, two, or three points more effective than the first reading, the same time might well have been used in reading new material with the possibility of acquiring 13 new points of information. On the whole, the data indicate that for social science material of the type used in the tests, a rereading is not justifiable in terms of the additional information secured in preference to spending the same amount of time in reading new material.

SUMMARY

On the whole, two readings at normal rate of the "Customs Duties" and "Boycott" materials prove definitely more effective in terms of the information test scores than one reading at normal rate. Since one group (two readings) uses virtually twice as much time as the other group (one reading) in covering the material, the question may be raised as to whether the superiority of the former group entirely compensates for the additional amount of time used when range and accuracy of information are the aims of the reading. The results indicate that for the type of social science material used in the two tests a single reading is relatively effective. The suggestion may be offered that a single reading of a larger body of material should prove more effective in terms of the information acquired than the rereading of a smaller body of material of the type used in the "Customs Duties" and "Boycott" tests.

THE PRE-PRIMARY—WHAT IT STANDS FOR—WHAT IT ATTEMPTS TO DO

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At the Susan B. Anthony School, No. 27, Rochester, New York, there evolved, through an effort to answer the question "Why are we having so many hopeless failures in the First Grades?" what are known as the Pre-Primary Classes. To many this term "pre-primary" is an unfamiliar one and needs explanation. We use this term to designate the classes made up of children who chronologically are six years of age, *i.e.*, who have a life age of six years, and who should, according to custom, enter the regular first grade but who, as far as we are able to determine by means of intelligence tests, have a mental age under five years, ten months, and therefore are not ready for first-grade work.

By no means are we positive that the mental age is correct in every instance, for language handicap on the part of the children in our particular community is so great a drawback in the giving of intelligence tests that it raises the question whether the child has done justice to himself in the test. Whatever the cause, however, the child is not ready for first-grade work. Should the kindergarten teacher feel that a child should be given a chance, this is done. Such requests, however, are few.

These Pre-Primary Classes, besides giving such children an opportunity to gain experience and to grow mentally, were organized with certain very definite aims, as follows:

1. To develop independence on the part of the child.
   a. To train the child to follow an instruction without being supervised.
   b. To train the child to answer a question without looking around for aid from other children.
2. To develop initiative and coöperation.
3. To cultivate school habits.
   a. Habit of attention.
      (1) By giving children things within their mental power and *holding them* to the *results*, thus avoiding the formation of wrong attitude toward school work, teacher, or school in general.
      (2) By keeping the children working to their full capacity.
   b. Habit of reading to *find out something.*
   c. Habit of comparison (needed in learning to read).
4. To awaken a feeling for the need of reading and to arouse a desire to learn how to read.
5. To cultivate desirable personal habits.
   a. Orderliness.
   b. Cleanliness.
   c. Punctuality.
   d. Courtesy.
   e. The proper handling of books.

The Pre-Primary teachers of the Susan B. Anthony School have very kindly given us a detailed list of the various means they have found helpful in working for the aims specified above. Following I have placed a few illustrations under the particular aim to which they apply, with a few explanatory remarks concerning each aim.

1. To develop independence on the part of the child.

It has been our experience that the foreign child, the slow child, or the slow foreign child is generally very diffident, shy, inclined to

wait for the bright child, the leader, to act before he attempts to do either a voluntary or a directed act. He has very little, if any, self-confidence. He seems afraid of himself. He must be told again and again, very explicitly and minutely, just what he is to do and then must be closely watched or he becomes confused and fails to accomplish what is desired of him. When asked a question he will either hang his head or look around at the faces of his companions to see whether he may not thus gain some help or even confidence. Placing these so-called "followers" together and definitely planning to help them overcome this weakness, we feel that when they do enter the first grade they will, because of the self-confidence and self-assurance gained, be able to attack the problems with a greater measure of success both to themselves and to the teacher.

a. To train the child to follow an instruction without being supervised.
   (1) By commands given to the class as a whole.
      (a) Touching parts of the body as the teacher names them.
      (b) Playing game of "Do This and Do That."
      (c) Holding children responsible for occupation work which has been explained to the class as a whole but is carried out by the children in unsupervised groups while the teacher is carrying on a reading lesson with another group.
      (d) By directed lessons in hand work as art or manual training.
   (2) By the assignment of special duties to individual children, as:
      (a) "John, give each child one half sheet of paper."
      (b) "Sam, collect erasers and clean them well."
   (3) By a series of instructions given by the teacher at one time, each child being held responsible for following the direction in the order given. This should be very simple at first and gradually increase in difficulty. Three to five minutes a day, two or three times a week, might very profitably be devoted to this type of work.
      (a) "Go to the window."
      (b) "Go to the door which leads to the outside."
      (c) "Go to the door nearest the cupboard; open and close it."
      (d) "Shake hands with Tony, clap three times, then take your seat."
      (e) "Hop to Joe, tell him he is a good boy, and ask him to come and sit with you."
   (4) Through free work periods.

The directed work of previous days should offer suggestions to the children. This period requires much careful thought and planning on the part of the teacher or much time may be wasted. The teacher must know what she wishes the children to gain and should surround each child with such material as will arouse in him the right reactions. During this period the teacher has a splendid opportunity to check the individual habits and encourage the formation of those desired.

b. To train the child to answer a question without seeking aid from other children.
   (1) By means of questions based on *well known* rhymes, stories, experiences.
      (a) The child must be *made to feel* he is capable of answering without assistance.
      (b) Care must be taken to word the question so there will be no doubt in the child's mind as to what is desired.
      (c) Arouse the feeling of satisfaction in the child when the correct response is given. Have the class clap for the successful one, place his name on the board, etc.

2. To develop initiative, coöperation, and self-expression.

It quite naturally follows from what has previously been said that a child of this type lacks initiative and may even be too retiring to coöperate when asked to do so. The free play period affords each child a splendid opportunity to carry out his own ideas and to develop in his own way the ideas suggested by the children or the teacher. In order to make this period of greatest value, however, the teacher should keep individual records of the children's progress in desired habit formation.

It is hoped that each class will carry on a coöperative project of some kind. This project work should call forth self-expression on the part of the child and should definitely train him in social habits. One of the most important and necessary of these habits is coöperation. The child must always bear in mind that he is a very small part of a great whole, but that he is also a unit by himself; he must learn to help not only himself but also his neighbor without interfering with the rights of others.

a. Through free play period.
   (1) The child is given an opportunity to carry out his own ideas by means of
      (a) Blocks.
      (b) Board work.
      (c) Crayons.
      (d) Moulding.
      (e) Paper cutting.
      (f) Wood, hammer, saw, etc.
   (2) The child is given an opportunity to work with others, through the making of coöperative buildings, etc.

b. Through class or individual project.
   (1) The project must be simple and above all based on the child's experience.
   (2) Suggested projects—home, grocery store, market, if in the neighborhood.

c. Through dramatization of simple stories.

d. Through games.
   (1) Play store. One child is storeman, other children come to buy. This furnishes a splendid opportunity for oral expression.
   (2) Play post office. One child is postmaster. Other children go to the post office and inquire for mail, as, "Is there any mail for John Smith of No. 32 Main Street?" This game helps in teaching the children their addresses. Children enjoy making a uniform for the postmaster and building a post office.
   (3) Play "show." Four or five children plan the entertainment, the remainder of the class are the audience.
   (4) Play circus parade. The children plan the parade and make crude costumes to represent the different animals.

e. Through all class exercises—everyone's help is needed.
   (1) Quiet time.
   (2) Rhythm.
   (3) Reading.
   (4) Music.

3. To cultivate school habits.

This purpose touches the more formal side of teaching and is more closely related to the work of the first grade. We definitely plan to cultivate those habits needed by the child as he goes on in his school work. It has been our experience that the slower the child the more necessary it is to make all habit connections which the normal child makes for himself. In Rochester special classes are provided for definitely defective children.

a. Habit of attention.

In striving for the habit of attention, the teacher must see to it that what is demanded of the child is within his mental power and then that he is held to the result. Here care must be taken that the work is not too simple, but that the child is kept working to his full capacity, thus avoiding the formation of a wrong attitude.

   (1) Periods of various forms of work should be short and full of activity.
   (2) Children should be given plenty of encouragement.
   (3) The spirit of play should be utilized.
   (4) Short physical exercises may be given frequently.

b. Habit of reading to find out something.

It is of vital importance that the child be made to realize that the printed symbol tells us something, that we learn to read in order to find out something, not just to repeat meaningless words. Reading means more than the vocal expression of the written symbol.

   (1) Begin with action words and sentences. Children *do* what printed symbol indicates and then tell what they did. This connects the symbol with the action.
   (2) The project furnishes much reading material.
      (a) Basis for this should be some experience common to all the children.
      (b) The children, with the help of the teacher's questions, give material to be used for reading.

(c) Each child should make and illustrate his own reading book based on the project.

c. Habit of comparison.
(1) Games of color, size, and shape comparisons.
(2) Word and picture matching.
(3) Phrase and word cards matched with chart containing whole story.
(4) Comparisons of completed work. Children decide why they prefer a particular piece of work.
(5) Characters in stories compared by the children to decide which they like best and why.

4. To awaken a feeling for the need of reading and a desire to learn how to read.
a. Teacher reads to the children from books, allowing the children to look over her shoulder.
b. Show pictures of story to create interest.
c. Ask children to bring in story books, cards, newspapers, etc. Discuss this material with the class and interested individuals.
d. Have the children make their own picture books. Suggest to the children that they bring in pictures to paste in a book. Teacher may print name of the picture or a sentence pertaining to it under the picture.
e. Encourage the children to observe street signs, etc.

5. Personal habits.

In school and out of school *now* and *in the future* the following personal habits are of importance for real success. There are plenty of opportunities for the alert teacher to help each child make them function in his life.

a. Orderliness.
(1) See that each child hangs his hat and coat in the proper place every day.
(2) Hold child responsible for the order of his desk, locker, etc.
(3) Make child responsible for putting away material he has used.

b. Cleanliness.
(1) Insist on clean face, neck, ears, hands, nails, and clothing every day.
(2) Hold up standards of neatness in all work done by the children by praising those whose work deserves it.

c. Punctuality.
(1) With the parents' coöperation insist upon the children reporting at school on time at every session.

d. Courtesy.
(1) Teach the children common acts of politeness as:
(a) Asking to be excused when passing in front of a person.
(b) Not interrupting some one who is engaged in conversation.
(c) Boys taking off caps in building.
(d) Respecting rights of others.

The foregoing outline indicates the necessity of a right attitude toward whatever is undertaken and the importance of the cultivation of desirable school and personal habits. But its main purpose is to outline briefly just how we are attempting to make success possible in the life of the little foreign child, the slow child or the slow foreign child; for without a feeling of satisfaction in accomplishment, the child's progress in school work is very uncertain and of doubtful value.

NEWER TENDENCIES IN LESSON PLANNING

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To obtain different goals we require different activities. As long as the center of gravity was in the teacher or the subject matter, we had one sort of plan. Now that we believe that the child is to be considered first, we must have another sort. With a philosophy of education changed to "respect the child—respect him to the end," whether he be rich or poor, of high or low birth, abnormal or subnormal, we can no longer have scholars who possess only encyclopedic knowledge fix goals of achievement toward which we coerce children to march in step. We marvel at the confidence in the possibility that children could do this. Practically nothing is so comfortably definite about goals and means now except that they never again will be definite. They must constantly vary to be of greatest educative value.

The lesson plan at present must begin where the average child in the group left off at his last lesson. It must be flexible enough to go anywhere with him within a wide field of experience by a procedure that must be determined by the pupil's weakness as manifested at the moment. It may be anything from a drill to sending a child out to see how the rain washed the earth into the gutter.

About twenty-five years ago a new philosophy of education came and a new psychology, carrying with them new laws of learning. The teacher's responsibility has been increased tremendously. I knew a teacher in good standing ten years ago who said, "I know my subject. I teach it according to the Herbartian steps. After I have taken a topic through them, my job is done. Those pupils who do not know the topic are not my concern."

The Herbartian formal steps permitted such an attitude. They provided for subject matter arranged systematically by the teacher. The child absorbed it or he was a hopeless case. If, after hearing the teacher give the lesson, he could not repeat in substance what she had said, he had not learned. Therefore he simply had to put in more time in order to memorize his book.

Modern teachers, however, must be more than reciters. They must be builders of S—R bonds, and S—R bonds have an obstinate way of refusing to be built unless the laws of learning are followed. Besides, one textbook becomes inadequate. The good teacher is put to it to keep in touch with more materials and they must be richer and more attractive than ever before. Also, she no longer must possess just a knowledge of subject matter. She must know, too, the life situations calling for that subject matter that she may reproduce them for the children. She must know the form in which the world wishes that subject matter available in its citizens. She must know to which individual to give a particular phase of it, and how that child is psychologically made up, so that she may get him to purpose wholeheartedly to experience the activity which will make that material his. Then she must watch the building of those S—R bonds under the other laws of learning just as a gardener watches the growing of a plant as he provides it with heat, light, and moisture. Her plans must lead on to check up on that growth, to develop it more and more richly.

Briefly, the chief differences are in providing for (1) motivation, (2) pupil activity, (3) repetition, (4) initiative, (5) presence of satisfaction in accomplishment, (6) a leading on of activity, and in keeping throughout all these the viewpoint that it is the development of the child toward desirable social abilities that matters.

The project method of teaching seems to me to be the most educative. Doctor Kilpatrick in "The Project Method" advocates using the same procedure for at least two types of projects: (1) the constructive and (2) the development of a skill. The child, he says, must in each of these cases purpose, plan, execute, and judge. In the latter type, he thinks that the teacher will probably have to do the planning. With that exception, the teacher sets up situations that will cause her pupils to do these four things. Obviously, a memorized formal Herbartian plan will not function here because, in executing it, it is the teacher who acts, and because the class interest may develop along a phase of the subject not foreseen by the maker of the plan. The old plans led and the pupil followed. Now the teacher must be willing to follow whatever valuable interest she finds to develop. For instance, in taking up the study of the westward movement in the United States, she may find a stronger motive for a study of frontier life or the possibilities of Alaska, or why the Mormons once were unwelcome in Congress, or for "the shedding of American blood on American soil" than for that topic which would logically come first.

Ideally an obstacle arises out of the regular flow of school work, probably so managed by the teacher, or intellectual curiosity leads to a broad question, which is seized upon by the teacher as worthy of study and by the pupils as a difficulty they wish to master. That purposing constitutes the motive which the teacher works to have arise. Her plans then take care to provide for sources of material so that the learners may inspect, organize, evaluate, and draw their conclusions.

Just what form the teacher's plans for the project should take no one seems to be ready to say definitely, but upon some criteria there is general agreement:

1. Is this experience what the pupils need at their present stage of growth?
2. Is the teacher providing adequately for the purposing of the pupils?
3. What is the relation between the subject at hand and educative goals? Does it fit in with her approved philosophy of education? What habits, ideals, concepts, etc., will it help to establish?
4. How does the subject fit into the curriculum? What is its value and importance in relation to the rest of the program?
5. Has the teacher a sound knowledge of her subject matter? This is essential. Textbook information is not enough. Her grasp must be broader than ever before because now she does not ask all the questions. The child, if rightfully motivated, also asks many and they may be searching ones on any phase of the subject.
6. Are there materials enough at hand so that the pupils will not be completely balked in their efforts to accomplish their purposes? Lesson plans must include such things as lists of references, pictures, slides, etc., available. Assembly talks, excursions, poster-making, scrap-book keeping, or any other activity which will give the experiences necessary to call the desired *S—R* bonds into play with satisfactory results to the child must be initiated.
7. Are individual differences provided for? "Modify your aims with reference to the individual capacities and interests of your pupils." (Colvin.)
8. Is there a checking up of results?
9. In a series of plans is there enough overlapping to provide for repetition of important essentials?

Doctor McMurry says that a long plan is a hindrance. The teacher is occupied with

attempts to recall it rather than with the "leads" of her class. He has expressed the opinion that a three-by-three inch paper is of sufficient size to hold all that an experienced teacher needs for reference.

Professor Mossman, in an address made to a class in elementary supervision several years ago, expressed indecision as to the best form. So far as she was able to judge, however, she advocated a plan of three columns, one for important items that the teacher feared she might overlook, one for a list of pupil activities the teacher expected to guide, and one for a list of materials.[1] I know of many good teachers who use this form with satisfaction.

Colvin in the second part of the *Eighteenth Yearbook of the National Society for the Study of Education* reports using the following form for reports of lessons written by student-teachers:

General Plan:
- a. Review.
- b. Advance.
- c. Assignment.

Outline of Lesson in Detail:
- a. Aim.
- b. Method.
- c. Questions asked.
- d. Illustrations used.
- e. Results.

This general scheme could be used as a form of preparation by a new teacher on a new subject. A second abridged plan would seem necessary for immediate reference while teaching.

A radical change in procedure has come with the individual method. It requires radically changed plans. They are written for the children to see and use. They consist as usual of goals, motivation, a list of activities, references, and checking up, but all in the child's language and from the child's viewpoint.

In this method the pupil takes the plan, called the assignment or contract, and follows it through individually instead of being directed through as a member of a group. Since this procedure is a direct result of the recognition of individual differences, the teacher suits the assignment to the average child in the group. There is the necessity, then, for individual conferences in which she takes care of the weaker student, and also of special assignments or a provision for extra social work to develop those above normal.

Whether or not teachers need plans is, of course, a matter of individual capacity and experience. Does a public speaker need to prepare his speech? It depends upon the audience, how many times he has made that speech before, and how well suited his personality is to that sort of thing. If a teacher knows her subject well, has taught it many years, is up-to-date in psychology, and is acquainted with the scope of the materials at hand, it would seem that a simple memorandum might be sufficient. So long as educators like Doctor McMurry feel the need of spending as much time beforehand in planning as they spend before their classes in teaching, however, I fear that few of us may take the liberty of seeming more capable.

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RELATIONSHIP BETWEEN THE MARKING SYSTEMS OF TRADE AND ACADEMIC INSTRUCTORS IN A CONTINUATION SCHOOL

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What is the relationship between the marks a pupil receives from an academic instructor and those that he receives from a trade instructor in the same subject? Which is more difficult to obtain, a high mark in the shop class or in the academic class for the same pupil? This is the problem to be taken up here.

The scope of the study involved a research and classification of 1200 report cards in a continuation school. Each pupil received marks from an instructor in academic subjects and from an instructor in trade subjects. The report cards were selected to cover the years 1919 through 1924 and also to include the largest range of teachers. Two hundred cards from each of the following subjects were selected: cooking, dressmaking, power machine operating, electricity, printing, woodworking.

During these years there was a turnover in the departments as follows:

Subject	Academic Instructors	Trade Instructors
Cooking	4	2
Dressmaking.....	5	5
Power machine	5	1
Electricity	7	3
Printing	5	1
Woodworking	6	4

The ages of the pupils in these groups range from fourteen to sixteen years of age. The previous schooling varied from the sixth grade elementary school to the third year senior high school. The marking system of the continuation school includes shop-work and academic subjects, as English, civics, hygiene, mathematics, and rating in reliability, application, courtesy, neatness. The continuation school trains the working child and the employer not only measures a pupil's intelligence but more often asks for one who can answer "Yes" to the following questions: Is he reliable? Is he prompt? Is he courteous? Has he a good personal appearance? These marks on reliability, application, courtesy, and neatness are as essential to the working boy or girl as his marks in scholarship and shop-work.

DISTRIBUTION OF MARKS

Ability in Dressmaking Work	Ability in Academic Subjects						
		1	2	3	4	5	Totals
	1	9	9	9			27
	2	5	46	31			82
	3	1	18	40	6		65
	4		1	6	15		22
	5				3	1	4
Totals		15	74	86	24	1	200

Note.—The diagram shows the distribution of 200 marks given by the five shop and five academic instructors in the dressmaking classes.

Hrs. Pres.	Absent	Truant	Tardy	Instructor	Reliability	Application	Courtesy	Neatness	Arith.	Eng.	Penmanship	Vocational aptitude
				Academic								
				Trade								

Grouping of academic work, arithmetic, English into one grade.

Note.—The chart below shows the mean-square-contingency:

80—The mean-square-contingency between the trade teacher and academic instructor in the cooking class marking *application.*

82—The mean-square-contingency between the trade and academic teacher in the cooking class marking *courtesy.*

88—The mean-square-contingency between the trade and academic teacher in the cooking class marking *neatness.*

55—The mean-square-contingency between the trade and academic instructor in the dressmaking class marking *application.*

89—The mean-square-contingency between the trade and academic instructor in the power machine class marking *application.*

CORRELATION

TRADE SUBJECTS—X MEAN-SQUARE-CONTINGENCY

ACADEMIC SUBJECTS	Girls: Cooking	Girls: Dressmaking	Girls: Power Machine	Boys: Electricity	Boys: Printing	Boys: Wood Work
Application	80	55	89	85	57	81
Courtesy	82	68	79	75	38	72
Neatness	88	81	85	85	48	83
Reliability	77	79	79	79	79	71
School Work Shop Work	71	69	54	81	73	35

CLASSIFICATION OF THE DATA

A. Records of 1200 children surveyed.

B. Pupil's report card.

C. Each instructor gave five marks to the same child on: reliability, application, courtesy, neatness. Shop product marks by the trade instructors; academic marks by the academic instructor.

D. Standard of marking system: (1) Excellent, (2) Good, (3) Fair, (4) Unsatisfactory, (5) Very Poor.

In a similar way the relationship was determined between marks given in trade and academic subjects of cooking, dressmaking, power machines, electricity, printing, and woodworking. The results are shown in the table.

Not all the groups in the continuation school were studied. Other subjects taught in the school are: novelty work, homemaking, millinery, typewriting, office practice, bookkeeping, sheet metal, mechanical drawing, salesmanship, machine shop work, etc.

CONCLUSION OF THIS STUDY

There is a very high correlation between the marks of the trade and academic instructors. The child whose work is unsatisfactory to the academic instructor proves also unsatisfactory to the trade instructor. The judgment used in marking by both trade and academic instructors reveals equally good discrimination and shows that mental and manual attainment are closely related.

THE PLACE OF MUSIC IN THE EDUCATION OF ADMINISTRATORS AND TEACHERS GENERALLY

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When we use this word *generally* we mean to include all persons connected with the teaching profession. It is our intention to use the term in its most comprehensive meaning. This is done because we wish to present ideas, suppositions, and conjectures as well as data, and definite suggestions touching the music preparation of all persons now or eventually to be concerned with the education of children. When we enumerate we shall find the following people involved in the consideration of our subject:

Superintendents
Principals
Supervisors and directors of special subjects, as: Art, Commerce, Education, Home Economics, Manual and Physical Training
Teachers of arts and sciences in all schools
Grade teachers
Kindergartners

If we have failed to include any individual or group of individuals, let the reader make the addition to the list as the omission comes to mind.

Our point is that all of these people by proper contact with music will be more liberally and practically fitted for happy and complete living, and that in so far as they do themselves live a complete and happy life, their attitude toward the best preparation for others to so live will be favorably influenced. We feel that they, through their own experience, will be impelled to see to it that opportunity for growth in the appreciation and performance of music shall be afforded all the young people with whom they come in contact. In other words, they will wish to see music an integral part of the education of all students in school and college, and will work to that end.

What education should mean in the lives of the masses of the people is today a moot question, even as it long has been. Some educators still act upon the belief that education is largely for a utilitarian purpose, with no place for frills, and that everything is a frill which does not produce results that can be weighed and measured. Most of these same educators are those in whom appreciation of the arts, with their spiritual and æsthetic influence, is largely undeveloped. Yet these men and women wish to turn out from the schools young people fitted for successful lives.

Surely many outstanding examples of successful people will need a new rating when success comes to mean full and complete living. Men have lived lives cramped and poor except in the accumulation of money, and have been called successful. Others have lived to accomplish much scientifically, but never to know a thrill from art, literature, or music, and have been called successful. Still others have lived to achieve artistically, but have had no balance-wheel for sane living, and yet have been called successful. If such persons deserve to be called successful, how much more broadly so could they have been had there entered into their experiences an appreciation of activities other than their chosen ones, especially those that lift men out of the purely material into

contact with things spiritual, and in this sense things true and enduring. Men generally live the lives for which their education fits them, but this does not mean that they are always living their best, for incomplete education has frequently cheated them of their just heritage. Education should prepare each person to do some one thing especially well and also to be a sympathetic and intelligent participant in the world's thought and activities, as expressed by the masses and by individuals. The average so-called successful man may never realize his lack of power to live fully and completely. Some men who have acquired money seek to enjoy a late-in-life leisure by retiring from business, but they seldom thrive, nor do they attain great satisfaction; for the happy and profitable use of leisure, entire or partial, is not, as a rule, to be grafted upon maturity. It is a thing which "grows by what it feeds on," and the proper régime of diet must be started in early years or the powers of appreciation will be starved to death from lack of nourishment in youth. Many educators are finding this to be true. Their capacity for the appreciation of music, for instance, has died an untimely death through lack of usage. The school executive who finds no place, or a very meagre one, for music in his curriculum for the prospective teacher, is generally the one who himself knows no joy in music. And if he has not this joy, it is generally because he has not had desirable contact with music. His musical sense is perhaps dead through malnutrition.

Music has been regarded by some of us in America not only as a profession beneath the dignity of a man, but also as an activity on which one could not, even as a patron, well afford to waste time, attention, interest, or money. The majority of men in the musical profession have been set apart, have been regarded as freaks or effeminate creatures of little account beyond the impractical field of their own accomplishment. The professional musician, having been illy paid, has been as a rule poverty-stricken, and this in itself was enough to cast indignity upon the whole group. In addition to this, if musical talent was discovered in a young person and an effort made to cultivate it, this person was immediately cut off from general education and made to specialize to such an extent that a broad-minded, well-balanced personality was rarely developed along with skill in musical performance and understanding. The possession of decided musical talent, to say nothing of genius, usually meant uncontrolled impulses and indeed the *cultivation* of eccentricities and abnormalities as evidences of that generally accepted attribute to musicianship, so-called temperament. That a woman might be a musician and be normal was reluctantly granted—not so a man! Not only was the musician eccentric because of a one-sided education, but very often he was poorly educated outside of his own field of action.

All of this has seriously prejudiced men against any first-hand contact with music. They have felt about it quite generally as some men do about church. Whatever redeeming features there might be in religion or the arts, a good many men have been content to get theirs vicariously through the women of the family. A change from this attitude is best to be accomplished by a change in experience, and there are many angles to the matter. It is the exceptional man or woman who, lacking certain experiences, can yet rightly value such experiences. Especially is this true of men in their attitude toward music. We would for a moment return to that moot question —*What is education?* The idea that we have already advanced is not new. It has been well said that to be educated is to

know something about a great many things, and to have expert, practical knowledge about some one thing. Music has a legitimate place in both these phases of education. It may well be the special subject of the student's work, or it may equally well be one of the many things which are to form the background for the outstanding life-work. From the nature of the subject of this article we are discussing the latter phase of the place of music in education.

We would dispel the idea, all too prevalent, that music is to be studied only by those who are noticeably musical, *especially* as being musical has meant and does mean today, in the minds of many persons, to have the desire and the capacity to *perform*. On the basis of experience and experiment we would submit the opinion that many persons are playing and singing more or less well, after considerable training, who are far less truly musical than many of the rank and file of people who lay no claim to musical qualities, and never realize the capacity for music appreciation which they possess, because of no right contacts with music. What we crave for America is not more performers, though we count on developing all the talent we can discover, no, nor more creators, though we are encouraging original creative work at all times. What we crave for our country is intelligent and appreciative listeners. And this, not that music may be nurtured, but that our people may have a true and trustworthy medium for self-expression and enjoyment, both of which may be afforded as life-long possessions by the simple contact with music which every individual attending the various institutions of education in our country may well have.

The trend of our thought is doubtless already apparent. That there may be no uncertainty about it, it may be well now to put what we hold to be the crux of the matter into plain words:

Music should be a requirement in the preparation of every individual who is to be connected with the field of education.

We have said that music is for everyone. We recognize that all are not equally musical. We hold, however, that the uninterested and so-called unmusical adult is no criterion upon which to base thought or action which permits students to be their own judge as to the wisdom of taking courses in music. The very student who would never dream of electing a course in music is the one who would find the greatest awakening from a properly selected course. Who is to put him in the way of thus benefiting himself? In our experience of fifteen years, in schools ranging from kindergarten to post graduate college, with approximately forty executives and heads of various departments, we recall only six who had even a casual acquaintance with music. We won't say that there was none of the other thirty-four who felt the value of music in education, but it is safe to infer that not thirty of them felt its influence keenly enough to take active measures to bring students whom they were in a position to influence into touch with it. Most of these executives would confess very frankly that they really knew very little about music. They would hesitate to admit the same ignorance about any other subject taught in their schools. No executive can be expected to be an expert along all the lines of work for which he is responsible in his position, but he should be able to value them. So far as music is concerned, he cannot intelligently know its value without some first-hand contact with it. These executives not only formulate the backbone content of their several courses, but they do unquestionably influence the student in his electives. In point of fact, electives are only elective within a prescribed circle. If the elective

groups of studies were made to include music, and a whole-hearted interest in it was shown by advisors, there would be a decided widening in the range of students who elect it and a consequent broadening of the artistic sense in this influential group of young people. We feel that as English and literature and certain branches of science are required in every course, so music should be. Can we substantiate our claim? We can try. We would not quail before the task of proving our ground if our claim included *all* college students. Much less do we hesitate when we are dealing only with those who are to be connected in some way with teaching.

It would seem unnecessary to draw attention to the fact that music plays so large a part in life. Like it or not, understand it or not, participate in it or not, we are made continually conscious of its presence. The universal place of music in the life of man is an historic fact. Primitive man and his descendants have played, fought, loved, prayed, and died to the strains of music. It is planted deep in human nature. Dr. G. Stanley Hall says: "Rhythm is so deeply rooted in biology that it secures most joy of life with the least effort." Rhythm is organic and, being so, it is an important factor in setting up emotional states which in turn react on our sensitive organisms, for in connection with primitive rhythmic response comes emotional stimulus.

W. J. Turner in his book *Music and Life* says that joyous, full-hearted emotions raise the tone of the human system. This agrees with the findings of the old Greeks that earning capacity was increased by proper recreation. The greatness of the Periclean Age is accounted for in part by the final musical training included in their scheme of education through which was developed a discrimination and judgment which reached over into all fields of activity and produced some of the greatest statesmen, poets, sculptors, orators, dramatists, and philosophers of history. Dr. Halbert Britan of Bates College, in his book, *The Philosophy of Music,* has put certain things in a very convincing manner. He recalls that Aristotle advocated music as a means for (1) pleasure, (2) moral growth, (3) mental development. The influence of music on these three phases of life he then discusses. Without quoting him we may do well to consider briefly the same matters here.

If this article were to deal with music as a vocation it would be a simpler matter to handle than it is. For there is an immense amount of evidence as to the justice and wisdom of fitting young people for a musical career as well as for business, engineering, medicine, law, commerce, etc. This is not systematically done as yet; it will be done eventually. But let us not forget our premise that we need to develop a musical public rather than music performers. Properly equipped teachers of music we have great need for, but this phase of the matter is not now under consideration.

The business of life—the bread-winning end of it—let us pass by on the assumption that education is taking care of that, though we are impelled to recall again the thought of the psychologists that the tone of the human organism is raised and becomes more capable of intelligent effort through true re-creation. But the leisure of people is a big part of the twenty-four hours of each day, and it does concern us in this discussion, for every person connected with solving educational problems should learn to enjoy truly his own leisure and should feel himself responsible for helping others rightly to enjoy theirs. What then should leisure do for us? It should give pleasure, and it should be able to take the mind into new channels of

thought not involved in the working hours, and to hold it there.

Music, in the interesting parlance of Dr. Spaeth in his *Common Sense of Music*, appeals to people anatomatically. They hear with their feet, their hearts, and their heads, according to the stage of development they have reached through contacts with, or exposures to, music. Probably everybody will agree that music has qualities that will give pleasure to the listener. Whatever plane he may have attained to, music of some kind creates a pleasurable reaction of some kind. Let us not scorn the physical, foot-listener. As we have said, a sense of rhythm is a biological possession and we not only recognize it but we cultivate it as a valuable response to music. Such response is of course a sort of tacit reflex action. It certainly is instinctive, the direct result of musical stimuli, and it involves no real initiative, no thought, no particular control. People who say they love music frequently get no more than this out of their love. To be satisfied with such response is to run into danger. But while there is no real appreciation in such response, it does indicate a certain sort of pleasurable experience, and as such may form a basis upon which to build a better and more genuine satisfaction.

As an outgrowth of the primitive response to rhythm (which does, of course, include tune or melody) comes the emotional experience, and here is found a great storehouse of possible good and evil. As Britan says, "Music is certainly not an immoral agent," yet much of the music that is heard and from which we cannot escape though we would, needs to be disinfected, as it were, by the intellectual element being sprayed into the physical and emotional miasma frequently rising from what we must feed upon or breathe. We have not been able to prohibit certain kinds of music that might well be, but we are slowly substituting a better sort in public places. Unfortunately, even good music can be prostituted by perverted or ignorant listeners incapable of finding anything more than a paltry appeal. The leisure occupations of people should bring moral growth. Since we have admitted that music can and frequently does exert a baneful influence, how are we to justify it now? The person who enjoys only poor music, or who gets only undesirable reaction to even good music, or perhaps fails to get pleasure out of any music, is the victim of habit. Dr. Bagley says habits are acquired, and that we need conscious guides to behavior. A genuine appreciation of good music is not a free-will gift of the gods, but is the result of directed contact. It requires effort in the attaining, but it brings a reward of pleasure and profit not to be measured. Genuine appreciation goes with powers of attention, concentration, discrimination, and imagination. The power to appreciate the arts, to be able to enter into the fullness and richness of life, is dependent upon the ability to experience in the imagination.

The natural, spontaneous appeal of music is emotional and, it has been said, is the most seductive of all mental activities. Certainly we wish to cultivate the emotions, or perhaps we should say, to train them. Music is a marvelous emotional power. It is difficult to find new words or ideas to describe it. It can, and does at times, carry one into realms where feeling passes beyond words. These moments of exaltation are rare. Emotions may be the spring of immoral thought and action. The emotions awakened by music are good or bad according to the power of the individual to connect them with ideals of action, and to control and govern them by an intellectual attitude. The purely emotional reaction experienced by the persons

who listen with their hearts only, as Dr. Spaeth puts it, may or may not be on a higher plane than those who listen with their feet. But it has been proven by experience and experiment that the feet or the heart or the combination of both fail to bring about the happy state of him who, in his appreciation, employs not only the physical and the emotional but the intellectual response as well.

Genuine appreciation is partly psychical. The difference between a good melody and a poor one, for instance, is not always to be stated in words—it is a thing felt. And if one doesn't feel it there is a period of contact with music which will have to be experienced before it can be felt. Great music is great, says Britan, because it expresses some profound idea in the universe. Composers rise to these heights only at times. We, as listeners, can only hope to do so at rare intervals. But much music has beauty, and dramatic interest, and intellectual appeal that is universal and fairly constant.

How are we to become able to enjoy this music? We now arrive at the third requisite for true education, as well as an added requisite for profitable employment of leisure, namely, that it shall afford mental growth. How is music to accomplish this?

The dramatic instinct more or less strongly developed in all and enjoyed at first hand or vicariously by everyone is, as one has well said, the effective contrasting of one thing with another. This power comes through use—an intellectual process—and demands opportunity to do the thing, and to discuss it with people who know and can suggest and advise. Sheer beauty is appreciated as our feeling is refined, and this too is an intellectual process in part, whereby we try to lay hold of the fine things in music, for instance, which we like, and thus to sense them again in other music; and in the same fashion we come to discover the things which we do not like and come to recognize them as evidences often of poor music. A purely intellectual interest with the right kind of study may become intensely fascinating. Music form, history, and analysis when vitally linked up with actual music become live and gripping features in appreciation.

The matter of intellectual growth seems then to be well within the province of music. We have so far discussed music from the appreciation side, having said nothing about the technical or theoretic study. Technical knowledge implies an understanding of, and practical experience with, performance. It is absolutely not essential to the appreciation of *music*. It *is* necessary for the appreciation of virtuosity and for competent criticism of artists and composers. Theoretic knowledge implies an understanding of certain fundamentals of theory, including the process of reading music; of analysis and of form.

We have now arrived at the point where we shall present definitely some courses which seem to us fitting to be included as requirements in the work of preparation for general teaching contacts, and not for those who will be called on to teach music, for they will need much more than is, in our opinion, necessary in the case of the others.

REQUIREMENTS FOR ALL PERSONS PREPARING FOR WORK IN THE FIELD OF EDUCATION

Music Appreciation (Involving physical, moral and intellectual stimuli)	4 hours
Choral Work (Involving music reading according to ability)	2 hours

(We recognize the fact that there is an occasional adult who cannot, as we say,

carry a tune. We grant that many who do sing have unpleasant voices. But unpleasant voices can be improved in a manner and to a degree that seems marvelous to the uninitiated, but which is really only the application of very simple and understandable basic truths in voice production. If careful investigation shows a person to be actually unable to sing, he should be exempt from this requirement, not that it is proven that he could not learn how to use his voice in accord with others, but that it would undoubtedly require an unwarranted amount of time in adult days to overcome the lack of proper training which he unfortunately missed as a child.)

We should like to emphasize what Lawrence Erb says in the January number of the *Musical Quarterly:* It is no longer necessary to show why music culture should be as far as possible universally disseminated. The question is, how can the general public be most effectively brought in contact with good music, so as to develop a universal love and appreciation of the best. Popular appreciation is built upon the power to enjoy. Music is the most personal and yet the most social of the arts. In its intellectual phases it isolates, but in its emotional appeal it unites. Good taste in music is the result of intelligent choice made again and again until a habit is formed. A good listener, appreciative of good music, is in a sense himself an artist. Schauffler brings us to this conclusion in his book, *The Musical Amateur,* when he discusses the creative listener.

We should say that this ability may be the happy possession of our American public—that it will come by giving to every child in the public schools the *opportunity to come under intelligent direction* in listening to music and in learning to participate in singing or playing or both. Is this an impractical program? If one is thinking of the immediate present, yes. Otherwise, no! For witness: In the space of four or five years, by organized action under state authority, a wonderful work was done in the schools of Pennsylvania. Standards of work were raised; requirements for teaching certificates were raised; salaries were raised. The music of the whole state has improved in proportion to the advance in the organization of the state program with its definite plans for bringing about its proposed reforms. There are now six states whose music policies are being directed by trained educators who specialize in music. The happy results of their administration of music affairs (despite there having been snares and pitfalls, not all of which were escaped, as is to be expected in any new endeavor), are proving an object lesson to observant educational bodies in other states. They are coming to realize that by failure to further music in all the schools, indifference and misunderstanding as to music and life are being perpetuated. So long as persons knowing nothing of the joy and value of music themselves continue to make educational schemes with no provision for music, or a very inadequate one, the vicious circle will prevail. It must not be allowed to prevail. The exclusively scientific and intellectual educational courses need to be enriched by the addition of subjects which will arouse fine emotional reactions of a human sort. Truly, as one philosopher says, all phases of school work would gain by more time being spent in cultivating a taste for the beautiful. And we cannot afford to wait for public opinion to bring this into effect. As is the case of all reforms, this one must come through the aggressive determination of the few whose thought is in advance of the times.

Granting that we have made clear our point, and that all persons going out into

the teaching field were having the contact with music which has been recommended, what might we expect as a result? We see in the future, superintendents and principals, advocates of music because they personally have experienced its splendid influence. We see them intelligently estimating the music work of their institutions because they themselves understand it. We see department directors including music in their required subjects because they feel that its influence is desirable in broadening and deeping the artistic and spiritual nature of their students, thus making them stronger teachers of their special subjects. We see grade teachers equipped to carry on the music of their grade in such manner as to vitalize the entire school day. We see kindergartners laying such a beautiful music foundation in the lives of their little children that the years to come will show a development otherwise impossible of attainment. And above all we see the directors of education, men and women whose lives have been rendered fuller and more complete through their own experience with music, outlining for all teachers and administrators such music work as will enable each one of them to become a more potent influence in the cultivation of those qualities which will help America to find her soul.

Because all phases of teaching need the vivifying influence of artistic beauty emotionally experienced and intellectually grasped, we would give every teacher first-hand, direct contact with some form of art expression. And since of all art forms music is the most universally and inescapably present in life, we would have every teacher experience a touch with the music —the true music—of the world, so that he may in turn feel impelled to influence the young people for whose activities he may be in a measure responsible, to expose themselves to this enriching and ennobling life force. Through such contact we shall find the imagination growing, indeed becoming such a vital thing that, through it, individuals and groups will come to picture a happier and more complete life. And in the strength of this vision may be built up life work of real permanence because it is of the spirit.

"To every man there cometh a way,
And ways and a way.
And the high soul climbs the high way
And the low soul gropes the low.
And in between on the misty flats
The rest drift to and fro.
But to every man there cometh
A high way and a low,
And every man decideth
Which way his soul shall go."

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BIOLOGICAL NATURE STUDY—COURSE OF STUDY UNIT JUNIOR HIGH SCHOOL

PEARL FORD
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GENERAL OBJECTIVES

1. To give wider acquaintance with the nature environment of the children, to the end that interest in this world of nature may be widened and deepened.
   a. To provide thus for a resource for leisure time both now and in the future.
   b. To help shape children's choices of high school subjects by creating a desire for later and greater study.
2. To give children some notion of the plan of nature:
   a. The variety of species.
   b. Their adaptation—each to his own peculiar environment.
   c. The struggle and the balance between species.

A contest goes on in pond and marsh among the forms of life. Each day the life of the individual is given to maintain the life of the species, and the balance of life among the races is kept, although the scales may tip somewhat now in one direction, now in another. Each represents high specialization along a given line of development, and seems perfected to the minutest detail in its fitness for life.—Dickerson.

3. To give some idea of observation as a scientific method of learning facts.
   a. To foster an attitude of open-mindedness.
   b. To develop habits of observation.
4. To teach children respect for living things—the idea that each creature lives its own life. The value of this is the fostering of "other-mindedness" in children. People should not destroy other living creatures unless they are enemies, or serve as food.
5. To teach appreciation of our natural resources and the need of conservation, especially of forests in Michigan; also the conservation of natural beauty, as the wild flowers.

GENERAL METHOD OF SETTING UP COURSE

At the beginning of the spring term, a visit to the Kleinstuck Preserve[1] was made by the entire seventh grade group. Before going, the purpose of the trip was discussed, and it was understood that it was to gather materials and make plans for the spring term's work. Definite questions were raised by the children, and definite answers were to be sought. Some of the questions raised were:

Shall we find more birds in the Preserve than in the trees around our homes? What birds shall we find?
What wild flowers shall we find?
What kind of water shall we find in the pond, running or stagnant?
Where can we find frog's eggs?

The group was divided into four sections according to the interests of the children, each section having a specific piece of work to do. One chose birds; one, cocoons; one, animal life in the water, and one, trees. It was decided to list all of the birds, insects, trees, flowers, and animals that were observed, to learn at least two birds by their calls, and two by their appearance.

[1] A 50-acre tract of land, given by the Kleinstuck family in 1924 to the Normal, the College, and the High School.

Definite people were made responsible for nets, pails, baskets, knives, and jars. The group decided when getting specimens to take only one of each kind, and not any when there was but a single specimen.

After the trip, and while interest was at its highest pitch, a period was set aside for a general discussion, in which the questions raised before the trip were taken up and lists were made of all forms observed.

BIRDS

Baltimore Oriole
Bluebird
Bluejay
Brown Thrasher
Chickadee
Cardinal
Crow
Downy Woodpecker
Flicker
Field Sparrow
Hawk
Humming Bird
Indigo Bunting
Kingbird
Kinglet
Kingfisher
Marsh Wren
Meadow Lark
Mourning Dove
Nuthatch
Robin
Red-headed Woodpecker
Red-winged Blackbird
Song Sparrow
Towhee
Wood Thrush

ANIMALS

Frog
Rabbit
Snake
Squirrel
Turtle
Snail

INSECTS

Butterfly (cabbage)
Caterpillar
Cocoons—Cecropia, Polyphemus, Promethea
Larva of Dragon Fly
Thousand-legged Worm
Water Spider

PLANTS

Flowers	*Trees*
Anemone	Elm
Hepatica	Maple
Wild Strawberry	Oak
Violet	Poplar
	White Pine

The nature study class was then divided into groups, each group being composed of those children having similar interests. One group chose the study of animal life, especially the frog, the second chose bird life, and the third, plant life, with a school garden as its chief playground. The following is a report of Group I.

THE FROG

Twenty froggies went to school,
Down beside a rushy pool;
Twenty little coats of green,
Twenty vests all white and clean.

The setting-up of definite large problems and outlines under these for observation and study.

During the trip of April 14, a mass of frogs' eggs and also some polliwogs were secured. At the beginning of the next class period the interest in frogs was keen, and the following discussion ensued, the greater share of it being contributed by the children, the teacher guiding:

Each living creature, plant or animal, has a threefold struggle. Each one strives to protect itself, to feed itself, and to produce and protect its young. In considering the means by which animals protect themselves, many examples were given. The rattlesnake has poison fangs, the scorpion stings. The males of most

members of the deer family—the moose, the elk, and the deer—have strong and sharp pointed antlers, which they use effectively in fighting wolves and other enemies. They have legs finely developed for swift running, and to run is often a better means of protection than to fight. The porcupine has long sharp quills which make a bad mouthful for any animal that attempts to nip the prickly ball. Among the reptiles of the world, the poisonous bite of the copperhead and the powerful muscles of the boa-constrictor are familiar examples of very effective special means of defense. Many animals are colored and marked in such a way that they match or fit in so well with the soil, leaves, or stones that they are inconspicuous.

In the foregoing examples, the structure of the animal has accorded it protection. Not only do animals have special forms of structure to protect themselves, but they have certain special habits. The following examples were contributed by the group:

Birds migrate from a bleak, foodless winter to the luxuriant tropical forests.

Bears and snakes hibernate to carry themselves through a season when food is scarce or wanting altogether.

The opossum "plays dead."

The turtle draws its head into its shell.

The second part of this threefold struggle of life is the getting of food. All living things, whether plant or animal, must have food. Examples of different methods of procuring food were discussed, the group contributing many from their own observations. Some of these were:

Man tills the soil and kills animal life.

Birds eat insects, seeds, fruit.

Bees find their food in the flowers.

Plants use raw materials and manufacture their own food.

Just as the structure of an animal protects him, so does it help him in the getting of food. Cattle have powerful grinding teeth, the woodpecker has a long hard bill for delving deep into the rotten stump, the honey-bee has a sucking mouth to suck the nectar from the flower.

The third great duty of all living creatures is to keep their kind in existence. In the lowest forms of plant and animal life, the cell divides into two parts. Among the higher forms, the processes of producing new plants and new animals are much the same. Eggs in the animal kingdom correspond to seeds in the plant kingdom. Insects, frogs, toads, snakes, and birds all come from eggs.

After this discussion, the following questions were set up by the group:

Problem I. What are the enemies of the frog, and how does he protect himself?

1. Enemies:
   a. Of the polliwog: black-swimmer, diving beetle, waterbug, turtle, frog, leech.
   b. Of the frog: loon, grackle, snake, heron, fish, man (fat frog's legs).
2. Structure for protection:
   a. Large and muscular hind legs.
   b. Web feet.
   c. Hardened joints at the bottom of the toes, giving a strong hold when pushing for the jump.
   d. Very long hind foot.
   e. Radiating toes on the front foot.
   f. Ears keen to sound.
   g. Chameleon-power to change color, to harmonize with environment.
   h. Eyes placed high up, so that the creature can float with only its eyes placed above the water.
   i. Poison glands, emitting a poisonous secretion, which it throws out to its enemies.
   j. Slime glands, which emit a slimy secretion to cover own body.

   References:

   Comstock, *Handbook of Nature Study*, pp. 192-194.

   Dickerson, *The Frog Book*, pp. 16, 17, 33, 87.
3. Habits—protective:
   a. Playing dead.
   b. Burrowing when young, except at night.
   c. Jumping.

d. Swimming.
e. Croaking stopped at sight of enemy.
f. Warning croak to other frogs.
g. Spasmodic activity.
h. Puffing out lungs to make itself look larger and more formidable to its enemies.

4. Activities—Pupils worked out the problem by means of:
   a. Special reports of observations of living specimens.
   b. Observations of structure under the microscope.
   c. Drawings in notebooks.
   d. Discussion with group and with others outside of classroom.
   e. Reading.

Problem II. What is the food of the frog, and how does he feed himself?

1. Food:
   a. Of polliwog: minute plant life found on stones, on the surface of the mud, and on the outside of larger plants.
   b. Of frog: living worms, snails, younger frogs, crayfish, small turtles, insects—spider, beetle, cricket, grasshopper, water-strider, dragon fly. Objects must be moving.
2. Structure—for food-getting:
   a. Horny upper and lower jaws, strong, thin, and sharp.
   b. Lower jaw back of the upper.
   c. Horny beak between lips, shaped like a bird's beak.
   d. Three rows of tiny black teeth below the mouth and one row above.
   e. Finger-like fringes at the sides of and below the jaws.
   f. Flexible hands.
   g. Short esophagus.
   h. Long and simple intestinal canal.
   i. Sense of touch highly developed in mouth.

   References:

   Dickerson, *The Frog Book,* pp. 28, 184, 190, 196, 202-239.
   Kellogg, *First Lessons in Zoölogy,* p. 28.
   Comstock, *Handbook of Nature Study,* pp. 194-195.

3. Habits—for food-getting:
   a. Has regular hunting habits.
   b. Springs at any tiny, moving object.
   c. Removes grass or earth from mouth with hands.
   d. Puts food into mouth with hands.

   References:

   Dickerson, *The Frog Book,* pp. 202-239.

4. Activities:
   a. Feeding of frogs and polliwogs.
   b. Observation.
   c. Discussion.
   d. Special reports:
      (1) The use of the hand; the short esophagus.
      (2) Variation in a frog's diet.
      (3) Grasshoppers as food.
      (4) The food of land frogs.

Problem III. How does the frog provide for the continuance of its kind, and how does it protect its young?

1. Mating season, like birds. Singing. Calls.
2. Eggs.
   a. Laid in a jelly-like mass in shallow water.
   b. Upper part of egg black, lower part light.
   c. Grow larger each day.
   d. Grooves appear.
   e. Begin to lengthen after four or five days.
   f. Hatch in nine or ten days.
3. Polliwogs:
   a. Resemble round balls.
   b. Gills and suckers appear.
   c. Heads grow larger.
   d. Inactive during development of special organs.
   e. Mouths open in two weeks.
   f. Begin to have larger spots.
   g. Swim, eat and grow.
   h. Tails grow very long.
   i. Hind legs appear.
   j. Front legs appear.
   k. Mouth and eyes changed to those of a real frog.
   l. Tail is absorbed.
   m. Developed in two months.

References:

Dickerson, *The Frog Book,* pp. 67-72; 176-185.

Comstock, *The Handbook of Nature Study,* pp. 194-195.

4. Activities:
   a. Pupils maintained and cared for a crude biological laboratory: jars, bottles, aquaria.
   b. Watched eggs hatch.
   c. Polliwogs watched from day to day to notice development.
   d. Observation by means of microscope.
   e. Reading.
   f. Discussion.
   g. Individual reports.
   h. Attractive booklets made and kept—a journal of observations illustrated with drawings and sketches.

Problem IV. What are the different kinds of frogs?

1. Common leopard frog:
   a. First to come in spring.
   b. Found in marshes and fields adjacent to brooks.
   c. A cheerful croaker.
   d. Brilliant green with dark blotches.
2. Bullfrog:
   a. Largest of all frogs, five to eight inches in length.
   b. Calls, "Be drowned," "Better go round," "Jug o' rum," "More rum."
   c. Devours quantities of smaller frogs, fish, etc.
3. The pickerel frog:
   a. Found in brooks and meadows.
   b. Brown with regular rows of squarish spots.
   c. Closely related to leopard frog.
4. The green frog:
   a. Color, changeable.
   b. Call, high-pitched and short, a scream when alarmed.
   c. Moults skin four or five times a year.
5. The wood frog:
   a. Small—2½ to 3 inches long.
   b. Color of leaves which hide it.
   c. Has ability to leap long distances.
   d. Croaks only at breeding season.
   e. Makes sound like that of the quacking of ducks.
6. The tree frogs:
   a. Kinds:
      (1) The common tree frog.
      (2) The green tree frog.
      (3) The spring peeper.
      (4) The cricket frog.
      (5) The swamp tree frog.
   b. Vary from one to five inches.
   c. Color of bark on which they cling.
   d. Opposable thumb.
   e. Sucking disc on each toe to cling to trees.
   f. Croaks in damp weather or at evening.
   g. Eggs laid in water.

   References:

   Hornaday, *The American Natural History,* pp. 361-365.

   Comstock, *Handbook of Nature Study.*

   Kellogg, *First Lessons in Zoölogy,* pp. 215-218.
7. Activities:
   a. Reports.
   b. Discussion.
   c. Observation.
   d. Use of pictures.

Problem V. What other activities do animals have besides food-getting, protection, and reproduction? Do animals play?

Just as man plays in order to rest his tired body and mind, and to preserve a healthy body, just so do animals spend a part of their time in play. Some familiar examples are:

Horses and dogs both love a good race.

Birds group themselves into choirs to practice their lovely songs.

Squirrels play "hide and seek" in the tree-tops.

Frogs use their chorus to express their joy of physical well-being.

OUTCOMES

I. A new interest in animal life was created, together with a desire to study other forms. As a result of

this desire snails' eggs, a lamprey eel, a turtle, a snake, several fish, baby mice, and a squirrel were brought into the classroom. Time was taken to discuss each one of these. A long list of nature books was selected to be bought by the grade. Several children bought books of nature stories.

II. The knowledge and appreciation of the struggle which each kind of life makes for existence. Food, not pleasure, the motive of the aggressor.

III. A study of the economic importance of the frog, and man's relation to the scheme of nature.

IV. Habits set up of good laboratory housekeeping—care of aquaria and creatures, feeding, cleaning, fresh water (siphon).

V. The formation of several nature study clubs for "choice of activities."

VI. A new sympathy aroused for the "feelings" of animals, and shown by a new thoughtfulness in the care of them.

(If I were teaching this subject again, I would endeavor to have the group or community do something for the Preserve, *e.g.*, transplant some rare flower or tree to the Preserve. Make signs of information.)

In addition to the references already mentioned, the following "inspirational references" are helpful:

1. *Reorganization of Science in the Secondary Schools,* Department of the Interior, Bureau of Education, Bulletin No. 26, 1920.
2. Downing, *How to Make a Nature Study Course.*
3. Denver Course of Study in Science.

AN ALL-YEAR PROJECT IN SCHOOL CITIZENSHIP

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Early in the term in one of my civics classes I noted a decided impatience with the mere learning of the facts and principles of citizenship. The boys were eager to practice good citizenship and to practice it directly in the school. They had evidently been motivated to right civic action; but no opportunity had been given them to practice it. Here was a problem for the teacher.

I took the pupils into my confidence. I told them frankly that we had as yet not devised any course in school citizenship and that it was an excellent opportunity for them to suggest what might be done in that direction.

Acting on this suggestion, the class resolved itself into a committee of the whole to consider in what ways they might put into practice the principles of good citizenship which they had learned. Under guidance they now began their work in earnest. They first adopted a class motto, "Be Dependable," which they believed would serve as an ideal.

They then began to consider the opportunities for the practice of good citizenship in the daily life of the school. After a series of meetings held in the civics class over a period of about two weeks, they brought forth a novel plan. They had decided that the class as a group should set up definite objectives based on class "shortages" or faults to be accomplished each month. They had resolved to find the "weaknesses" of the class as a whole as

citizens of the school and to eradicate them in short order by concerted action. Furthermore, only those objectives that met the standards which they had decided upon were to be chosen. All objectives were to have the following standards:

1. They must be worth while; *i.e.*, they must tend to develop qualities of good citizenship.

2. They must be attainable by all.

3. Their accomplishment must be of such nature as to be readily checked up by the class.

The gaining of the objectives by each individual was to be part of the regular work in civics and was to receive credit as such in the bimonthly grade.

After a brief discussion as to the outstanding "shortages" of the class, taken as a group, they determined upon two as most vital and set up objectives designed to overcome them. From that time on to the end of the year, objectives—sometimes two, more often three—were set up by the class each month based on the outstanding class "shortages," always taking care that they met the standards set up in the beginning. Here are some sample objectives taken at random which were actually used by the class:

One hundred per cent membership in the Junior Red Cross.
The keeping of a budget.
The beginning of a bank account.
A record of regular saving.
An improved scholarship record.
A perfect attendance record.
Improved personal appearance (definite criteria and inspection were agreed upon).
Participation in the extra-curricular activities of the school.
A perfect conduct record.
A perfect home-lesson record.

After the objectives were agreed upon by the class, they were placed upon the board and then copied on slips of paper and kept by each boy until the end of the month. At frequent intervals the class chairman reminded the boys of their objectives and urged them to make a record. At the end of the month each boy in a signed statement on the back of the slip told what he did to accomplish each objective. His statement was then checked by committees appointed by the class chairman. The teacher and class then gave each a mark for his accomplishment. The slips of paper proved unequal to a month's wear and were discarded for attractive cards printed by several members of the group in a nearby neighborhood boys' club.

From the beginning the project was taken seriously by the boys. They now felt that their everyday life in the school gave an opportunity to practice good citizenship. Civics to them was no longer a series of facts to be learned and discussed for probable future use; it was now a vital part of their everyday life and behavior in the school. Furthermore, throughout the year they were conscious of their "shortages" as citizens and their objectives gave them a very definite goal to work toward in their daily life as citizens of the school.

On the whole, the project was highly successful. Several teachers who taught the group in other subjects noted their continued improvement; published school records proved it.

Several other civics classes took up the idea and practiced it with some success. The project proved to be a splendid cooperative achievement in conscious evolution in school citizenship.

A TEST RECORD SHEET

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The purpose of this article is to present to teachers, supervisors, and college instructors a device which may assist them to make their ordinary classroom testing more useful and more pleasurable.

It is no doubt safe to say that tests or examinations will continue to be given for a long time yet because testing seems to be indispensable to good classroom procedure for at least one reason—that of measurement. We measure a pupil's learning for several purposes, among which these three are, possibly, the most important: first, to ascertain what the pupil has not learned so that we may teach him what he does not know; second, to secure a rating so that a useful record may be kept of his progress; and, third, to measure our own success.

If we are agreed that testing is necessary in school work, then, perhaps, we wonder what the various types of examinations are and which of these are the best. There are three types of examinations, namely: (1) the traditional "essay-type" of written examination, (2) the standardized educational test or scale, and (3) the newer objective examination.[1] We have been shown the value of the standardized test[2] and it has now been pretty well proved that the newer objective tests are superior to the traditional essay test.[3]

It is not the purpose, however, of this article to comment on the various kinds of tests, but, as earlier stated, to present to teachers, supervisors, and college instructors a device which may assist them to make their ordinary classroom testing not only more useful but also more pleasurable. While the device presented is adaptable to all three types of examinations mentioned, its greatest use is probably in connection with the newer objective tests, examples of which are the simple recall questions, completion exercises, true-false statements, the multiple answer test, the best answer test, matching exercises, etc.[4]

The device is a test record sheet[5] which shows in summary form numerous facts that one wants to know about a test. The record sheet here advanced shows in what subject the test was given; what kind of test it was; what ground it covered; to what grade and section it was given; when it was given; who made it; how large a class took it; what the possible score was; four descriptive measures of the distribution, of which one is the median; the correlation with a chosen criterion; and by what method the correlation was determined. The record shows further the number of times each question was missed; how the class scored in order of rank, the highest pupil being listed first and the

[1] Ruch, *The Improvement of the Written Examination*, Chapter I. Scott, Foresman and Co., 1924.
[2] For example, read: Trabue, *Measuring Results in Education*. American Book Co., 1924.
[3] Ruch, *The Improvement of the Written Examination*, Chapters III and V.
[4] For a discussion of these tests see Ruch, *The Improvement of the Written Examination*. Scott, Foresman and Co., 1924. See also Paterson, *Preparation and Use of New-Type Examinations*. World Book Co., 1925.
[5] This test record sheet is the result of the combined efforts of Mr. Lester K. Kirk, Detroit University, and the writer.

lowest one last; the letter marks assigned to the various scores; the grade distribution, which shows the number of A's, B's, C's, D's, and E's that were given and also what per cent of each of these letters was given, all of which assists one to tell how nearly the grading corresponds to the normal curve.

The record sheet has several outstanding uses. It permits one to keep a permanent record of all test results. This may in time make it possible for one to build up standards of achievement in a given subject for a given grade or class. It permits of some diagnosis because it shows the teacher just what statements were missed the most frequently by his class. By having the class scores arranged in serial order it permits one to assign letter grades more justly.[6] The record sheet has other uses which come to the surface as it is put into practice.

That the value of the test record sheet may the more clearly be brought out, a report is here made of a test given to a ninth grade civic science class of sixteen members. The test, prepared by a student teacher, was a best answer test. There is not enough space here to present the entire test, but the directions and two statements follow:

CIVIC SCIENCE EXAMINATION

Directions: Underline the *best answer* of the three after each statement. Underline *just one.*

1. We need food because
   a. It satisfies hunger.
   b. It enables farmers to work.
   c. It builds up the body.
2. The human body is largely made up of
   a. carbon
   b. water
   c. nitrogen

On the following page is a duplication of the report of the test which the teacher made to his supervisor.

As the report clearly shows almost everything that one might wish to know about the testing, it is not necessary to discuss the report in detail. It may be said, however, that all of the test statements should be at hand for one to make a most careful examination of the whole thing.

Note that the total possible score was 35, which is the same as the number of statements made. Observe the wide range of achievement of the class, the scores ranging from 14 to 32. The interquartile range, however, is only 4 points, as may be seen by subtracting the first quartile from the third. The median is 26, which is 9 points below the possible score. A glance at the teacher's grade distribution reveals a fairly normal curve. Note the number of times each statement was missed. Of the examples given, the first was not missed by anyone, while the second was missed by two people. What was the matter with number three, since nearly everyone missed it? Suffice it to say that it was a technical question which might not have been well taught. It is easy to see what statements the teacher most likely stressed in review the next day. It will be noted that the Spearman rank difference coefficient of correlation (P) with the intelligence quotients of the class was as high as .80, P. E., .06. This correlation shows the teacher to some extent how well he succeeded in getting the various class members to achieve in accord with their individual capacities.

Thus the usefulness of the test record sheet may be appreciated. The writer has employed the device for the past two years and has found it helpful in his supervision; his student teachers, after they become acquainted with the scheme, take a greater pleasure in giving tests than they had imagined they ever would.

Any reader has the writer's permission to mimeograph or print this test record sheet and to modify it to suit himself.

[6] Rugg, *A Primer of Graphics and Statistics for Teachers*, pp. 65-82. Houghton Mifflin Co., 1925.

Test Record Sheet

Test in:	Civic Science	Number Taking Test:	16
Kind of Test:	Best Answer	Total Possible Score:	35
Covering:	Foods	First Quartile:	23.50
Grade IX:	Section 1	Median:	26
Date Given:	October 8, 1925	Third Quartile:	27.50
Teacher:	J. R. Oltobell	Correlation with:	I. Q. p = .80 ± .06

Number of Times Each Answer was Wrong or Omitted

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	2	14	7	4	1	1	13	3	4	1	8	4	4	6	9	1	13	1	2	3		1	2
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
7		7	8	4	1	1	6	3	1	2	—												
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72

No.	Student's Rank	Score	Mark
1	C. T.	32	A
2	M. S.	29	B
3	C. G.	28	B
4	O. H.	28	B
5	R. G.	27	C
6	G. M.	27	C
7	A. M.	27	C
8	L. T.	27	C
9	L. J.	25	C
10	M. P.	25	C
11	H. T.	25	C
12	E. C.	24	D
13	J. B.	23	D
14	H. B.	22	D
15	R. B.	19	E
16	C. D.	14	E

73	74	75	76	77	78	79
80	81	82	83	84	85	86
87	88	89	90	91	92	93
94	95	96	97	98	99	100

Grade Distribution

Grade	Number	Per cent
A	1	6
B	3	19
C	7	44
D	3	19
E	2	12
Total	16	100

THE CLEARING HOUSE

GOOD ENGLISH WEEK

The use of poor English on the part of the student may be due to one of two things: either ignorance of what is right or carelessness. I believe that most of the mistakes made by high school students are due to carelessness.

In the one week set aside as "Good English Week" we cannot do much toward actually teaching better English, but we can check up careless mistakes. With this in mind our committee set out to find the most effectual way to warn against slovenly, careless habits of speech.

In the last few years, since the traffic problem has become so important, the Traffic Department of Los Angeles and the Southern California Automobile Club have been doing probably as efficient advertising as any which is done in the world.

In taking over the idea suggested by the Automobile Club signs, the committee found that these signs could readily be adapted. Stands were made to resemble those we see every day along our boulevards. They were constructed of a single beam about six feet (or less) in height, with crossed pieces at the base to make a firm standard, and with two pieces of beaver board twelve inches square placed on either side at the top of the beam. One of the corners of the square board was placed at the top of the beam. The white cards containing the warning slogans were of heavy shiny paper. Two cards (one on either side) could be attached to the beaver board with thumb tacks.

These stands were placed in the center of each hallway, near an entrance or near a stairway. We used such slogans as the following near the R. O. T. C. Department:

WARNING! Poor Speech Makes You a Private in the Ranks!

HALT! Speak the Language of Your Flag!

Near the Commercial Department our signs read:

SLOW UP! The Business World Today Demands Good English!

STOP! Invest in Good Speech—It Pays Daily Dividends!

Other slogans used were:

DANGER! What You say for Humor Others Adopt as Habit.

Beware of *Jist, Agin, Git.*

Straight Ahead! Better speech—better jobs. Turn to Right Speech.

CAUTION! Do Not Try to Murder the King's English!

CAUTION! Badly Spoken English Hurts a Patriotic Ear!

Straight Ahead—Good Speech Will Light Your Way into the Best of Company

WARNING! Make a Friend of Good Speech.

HALT! Slang is Not Allowed Here!

BEWARE! Slovenly Speech Bespeaks Slovenly Minds.

WARNING! Better Speech for Better Americans!

CAUTION! Say "It is he," "It is she," "It is they," "It was they."

OUTLAW! *Ain't, I seen, I ain't gonna do nothin', You was, I done.*

SLOW! Whatever is Worth Saying is Worth Saying Well!

NOTICE! Your Speech Errors.

These cards may be used effectively without stands—they may be tacked on bulletin boards, doors, above stair landings, etc.

Just two weeks before our Good English Week, the Traffic Department of Los Angeles decided to cut down the death rate of pedestrians as well as to facilitate

more rapid movement of motor vehicles by paying particular attention to "jaywalkers." It became quite a familar sight at downtown intersections to see persons who had dodged across the street in front of oncoming traffic being conducted back to their starting places by traffic policemen. One was apt to be arrested for "jaywalking."

We capitalized this idea by having small green tags printed using these words:

JAYWALKING ON GOOD USAGE STREET

These tags were given to teachers of every subject. A student who made an error in speech during the class hour was presented with a jaywalker's tag at the end of the recitation hour.

The traffic at downtown crossings moves at the ringing of a bell and the falling down of a yellow "Go" sign.

We had "Go" and "Stop" signals made of heavy red and yellow card board to place at "dangerous" turns in our hallways. These signals were attached together, one being left up in place, the other being left down. The two words "Go" and "Stop" were printed at the upper right-hand corner of the cards, which were 6" x 20" in size. Some of the slogans used were as follows:

Go! Say it in English!
Stop! Better Speech for 1925!
Go and use good English!
Stop your Poor Speech Habits!
Go! Make a friend of good speech!
Stop! Think before you speak!

To further carry out the automobile sign idea, we borrowed for the background of other slogans—the new bright yellow automobile licenses for 1925. 19-25 served as the number on the card. In the lower left-hand corner we had these words printed in small letters—*Grammar Poster License.* A heavy border line of black, with small dots in the corner to represent nails, helped to carry out the resemblance. Some of the slogans used on these were:

Speak Good English and Your English Will Speak for You.
Say it in English.
American Speech Means American Loyalty.
American Speech Means American Unity.
American Speech for American People.
One Flag, One Country, One Language.
Blest Be the Tongue that Binds.
A Dictionary in Hand is Worth Two in the Library.
You Can Talk, but Can You Talk Well?
Be a Patriot—in Thought, in Deed, in Speech.

The traffic idea was original with the committee. The slogans themselves, however, were not original—they were simply adapted to our needs.

BESSIE GILL,
Franklin High School,
Los Angeles, Calif.

NOTES ON DISCIPLINE

1. A teacher who says the least and speaks in the lowest tone of voice commands the best discipline.

2. The best disciplinarians make their demands requests. One teacher may antagonize a child by asking him to pick paper from the floor; another teacher will make the child feel honored in being selected to do this for her.

3. The good disciplinarian commands respect through her general bearing and teaching methods. Discipline is secondary to all her other work.

4. One should recognize the fact that all children cannot be disciplined in the same way; study the temperaments of individual children and adjust discipline accordingly.

5. Some trouble is brought about through the teacher's antagonizing a child. "Never

touch dynamite with a match" is a good caution.

6. The skillful teacher so plans her work that every child is kept profitably and happily occupied, thereby giving very little time for disciplinary trouble. The busy child has no time for mischief.

7. The good disciplinarian does not sputter and scold. Such a method accomplishes nothing; the children do not hear it and it tends to general distraction.

8. It is unwise to become angry or "strike back" at the child who is impudent. The impudence is seldom repeated if the teacher calmly controls herself when correcting a child.

9. When there seems to be "trouble brewing" with a child, the teacher should look for some good point about the child and recognize it as soon as possible; this will usually prevent a development of the threatened trouble.

10. A child should never be allowed to acquire the feeling that he is "down and out"—that "nobody loves him." The child who has been knocked about at home often responds to the kindly word of a teacher.

11. A healthy teacher is essential to good discipline. When one does not feel well, "things just seem to happen."

12. The successful teacher and disciplinarian is constant; she is not erratic or moody. The teacher who is exacting in both work and discipline, yet continues to create an atmosphere of sunshine, gets results.

13. Avoid "don'ts"; use "do's" and be ready to substitute for anything you take away.

14. The clean, tidy, and attractively arranged classroom does more to help along good discipline than we imagine.

15. Thoroughly prepared work on the part of the teacher and a genuine enthusiasm allow little room for disciplinary troubles.

16. When it is necessary to reprimand an individual offender, the wise teacher does not attract the attention of the whole class in doing so. She goes to his desk quietly and adjusts matters. Rather than suspend the attention of the whole class, it is better to ask the child to step either to the rear of the room or outside of the door to wait until the close of the period. It is never wise to ask the child to leave the room unless absolutely necessary.

17. Heart to heart talks with unadjusted individuals after school hours often adjust many difficulties.

18. It is recommended that teachers having little annoyances with individuals talk with other teachers who have had or are having the same child, and with the principal, seeking advice as to the best method of procedure. Have conferences with members of the family, in cases of continued annoyance.

19. The practice of sending a child to the principal for misdemeanors is not effective, as a rule. The best discipline comes from within, and not from threats or fears without.

20. We are sometimes loath to believe that a child may be right and a teacher may be wrong. There is no keener judge of justice than a child.

JASPER T. PALMER,
Supervising Principal,
Mount Vernon, N. Y.

AS REPORTED

PROCEEDINGS OF THE SIXTH ANNUAL MEETING OF THE NATIONAL CONFERENCE ON EDUCATIONAL METHOD

The program of the National Conference on Educational Method was carried out at the Washington meetings as announced. All the sessions were held at the Mayflower Hotel and the rooms provided, which had been specially engaged, proved most satisfactory. The attendance was large. At the Tuesday session there was standing-room only, and at the luncheon the two hundred and thirty-five who were seated represented only about half of those seeking accommodation.

All of the papers read pertained more or less closely to supervision. Professor W. H. Burton, of the University of Cincinnati, discussed "The Evaluating of the Efficiency of the Supervisory Program." He made clear that there must be a definite program to evaluate. Miss Estaline Wilson, of Toledo, showed why it is that supervisors are so often unwelcome to teachers. Professor W. S. Gray, of the University of Chicago, outlined at length an experiment in the improvement of reading which he is undertaking under the Commonwealth Fund. Finally, at the first session, Professor John J. Mahoney, of Boston University, held up to scorn the sort of thinking which is embodied at present in courses of study in history for elementary schools.

At the luncheon there were five speakers. Professor Frank M. McMurry, of Columbia University, declared that visiting the teacher at work is the heart of supervision. Superintendent Fred M. Hunter, of Oakland, California, pleaded for a better understanding and for better coöperation between supervisors and principals. Miss Mary Dabney Davis, of the Bureau of Education, told what information the Bureau is seeking to collect and disseminate in the field of kindergarten-primary education. Miss Katharine Hamilton, of St. Paul, Minnesota, described the demonstrations of teaching which principals and supervisors study together in St. Paul. In closing the program, Professor James F. Hosic, of Columbia University, called attention to the fact that but little scientific study has as yet been done in the field of supervision as such; practical workers should coöperate with specialists in this important work.

On Wednesday the Conference joined the National Primary Council at luncheon. The chief speaker was Professor William H. Kilpatrick, of Columbia University, who explained the wider meaning of method, which has to do with the entire unfolding experience of the pupil.

The closing program on Thursday presented four speakers. Professor Orville G. Brim, of Ohio State University, gave an interesting account of how his classes analyze the teaching of Professor Dewey and then make inquiry as to how these teachings apply to supervision and the curriculum. Miss Rose Hardy, of Washington, D. C., spoke of the ideals which underlie her work. President C. H. Fisher, of Washington State Normal School, Bellingham, described the organization of the training school of his institution and gave several illustrations of projects as units of the curriculum. The last speaker, Miss Mary A. S. Mugan, of Fall River, Massachusetts, gave an admirable account of the steps actually taken in a junior high school to improve teaching.

Because of the number of speakers and the size of the audiences, there was no discussion at any of the sessions. If there are to be discussions at the annual meeting they will have to be provided for in special closed sessions.

At the business meeting on Tuesday, five members of the Board of Directors were elected to succeed directors Madden, McMurry, Pennell, Simpson, and Tidyman, whose terms expired: Professor A. S. Barr, University of Wisconsin; Professor W. H. Burton, University of Cincinnati; Professor W. S. Gray, University of Chicago; Mr. Worth McClure, Assistant to the Superintendent of Schools in Seattle; Miss Mabel E. Simpson, Director of Elementary Education, Rochester, New York.

The following resolution was offered and unanimously adopted:

Resolved, That the Board of Directors of the National Conference on Educational Method be and hereby is instructed to prepare a plan of reorganization of the Conference intended to adapt it better, if possible, to the present need of a clearing house of supervision and to present this plan for consideration and adoption at the next annual meeting of the Conference.

The Board of Directors met after the luncheon on Tuesday and approved the report of the Secretary-Treasurer as printed in the Journal of Educational Method for April, 1925, and also the financial statement for the fiscal year 1925-1926.

The making of a contract for the publication of the Journal for the ensuing year was left in the hands of the Executive Committee. The Secretary-Treasurer was authorized to arrange for one session of the Conference at the summer meeting of the N. E. A. in Philadelphia.

At a second meeting of the Board on Wednesday at noon, Miss Simpson was re-elected president and Professor Brim vice-president for the ensuing year. Professor L. J. Brueckner, of the University of Minnesota, was elected a member of the Executive Committee for a term of three years to succeed Miss Katharine Hamilton, whose term expired. The President and Secretary were instructed to prepare a plan of reorganization of the Conference and submit it to the members of the Board by mail. On motion of Professor Horn, the appointment of a committee to draw up a proposal for a year book was authorized.

The sixth annual convention of the Conference was the most expensive but also the most successful. Copies of the program were more widely distributed. A keener interest in the luncheon, with its attendant social features, had been

FINANCIAL REPORT OF
THE NATIONAL CONFERENCE ON EDUCATIONAL METHOD

MARCH 1, 1925, to MARCH 1, 1926

Receipts

Balance on hand March 1, 1925	$ 659.26	
Memberships and percentage on subscriptions from World Book Company	1,663.79	
Accrued interest on Savings Deposit	13.32	
Miscellaneous (Sample Projects, etc.)	6.84	
Total Receipts		2,343.21

Expenditures

Postage	53.10	
Printing and supplies	40.25	
Editorial assistant	560.00	
Miscellaneous	54.88	
Total Expenditures		708.23
Balance on hand March 1, 1926		$1,634.98

aroused. The unity of the program gave it greater force. There seems to be no doubt that the group which finds a real outlet in the Conference is made up of those immediately concerned with supervision. Miss Simpson proved a remarkable organizer and well deserved the honor of reëlection and an opportunity to carry through the enterprises which the Conference has begun. One of these is the compilation and publication of a roster of persons engaged in supervision. Considerable work in collecting names for this roster has already been done.

For next year an attempt will be made to select a hotel as headquarters so that members of the Conference may fraternize.

JAMES F. HOSIC,
Secretary.

ELEMENTARY SCHOOL PRINCIPALS AT WASHINGTON

The Department of Elementary School Principals has established itself as one of the most vigorous and important in the National Education Association. The program which the Department carried out at Washington in February included three general meetings in the Auditorium, a dinner at the Raleigh on Tuesday evening, and several committee breakfasts.

Thirteen speakers appeared on the general program, almost all of them men and women of national reputation, including Miss Mary McSkimmon, President of the N. E. A., and Dr. A. E. Winship, veteran editor of the *Journal of Education.* More than a dozen persons responded to the call of the toastmaster at the annual dinner. The presiding officer, Mr. Ide Sargeant of Paterson, New Jersey, was especially happy in his introductions, and he did not fail to have his home folks with him; both his superintendent and his Congressman spoke. At the dinner, at which the Director of Prohibition Enforcement, Mr. Lincoln C. Andrews, appeared, and also at the general session, where a resolution for law enforcement was passed, sentiment in favor of the Volstead Act was cultivated.

The Committee on Standards and Qualifications for Elementary School Principals adopted a plan of procedure and mapped out a series of investigations intended to determine what principals do and should do, their present status, and what steps should be taken to improve that status. The final report of the committee will deal with personal, academic, professional, and practical qualifications, certification, tests of fitness, the purpose and content of professional courses for principals, and methods of improvement of principals in service. A report of progress will be made in Philadelphia in July by the chairman of the committee, Mr. W. T. Longshore, assisted by Professor James F. Hosic, secretary of the committee, and Professor J. Cayce Morrison, of Ohio State University, who has recently directed a study of the status of elementary school principals in his state.

CALIFORNIA KINDERGARTEN-PRIMARY ASSOCIATION

About two hundred and fifty kindergarten and primary teachers met in a varied two-day program for the second annual meeting of the California Kindergarten-Primary Association at the Hotel Fairmont and the Commodore Sloat School, San Francisco, November 27 and 28, 1925. Miss Katherine McLaughlin, University of California, Southern Branch, presided.

The beloved memories of Miss Anna M. Stovall, a pioneer of early childhood education in California, charter member and Treasurer of the Association, hallowed the opening moments of the convention. The Association is grateful to Miss Marion Barbour for her words of tribute and to Mr. Rudy Seeger for his beautiful rendition of Schubert's "Ave Maria," which expressed so exquisitely the loving appre-

ciation all felt for the life of Anna M. Stovall.

Cordial greetings were extended to the Association by Superintendent J. M. Gwinn, San Francisco, Mr. Roy C. Cloud, President, Bay Section, and by Miss Clara Crumpton, State Teachers College, San Francisco.

Definite policies were outlined for research investigation as follows:

1. The development of the Nursery School Movement.
2. The study of teacher-training problems.
3. Consideration of administrative problems.
4. Equipment.
5. Curriculum-making.

Three reports, followed by discussions, were made by the Research Committee.

Miss Barbara Greenwood, University of California, Southern Branch, reported on the development of the Nursery School Movement, tracing the progress in England, Germany, and the United States and foreseeing opportunities for rapid development in this country. Miss Greenwood stressed the urgent need for workers in this field, for which she feels the kindergartner is best equipped to assume the working out of the new problems involved.

Miss Yetta Shoninger, State Teachers College, San Jose, reported on and led in a discussion of the "Problems in Teacher Training."

Miss Clara E. Kapps, State Teachers College, Chico, led in a discussion concerning primary research work. "What Primary Work is Doing for the Higher Grades," "The Use of Self-Rating Scales," and "Possibilities of Keeping Workshops Open after School Hours" were some of the topics discussed and to be considered more fully in the committee's work of the coming year.

The Saturday morning program was one of great benefit and inspiration. Through the courtesy of the San Francisco Board of Education and under the supervision of Miss Julia Hahn, nine classrooms showing work in the kindergarten, first, second and third grades were open to the delegates and visiting teachers from 9 until 10:30. The free use of materials, literary appreciation, music, reading experiences, class discussions, a puppet show, checking of individual records, the use of a store in number work, writing, arithmetic drills, number games, and the use of a coöperative library were among the many inspirational activities seen.

Following the demonstration, Miss Hahn led in a discussion of the problems involved, which was enthusiastically carried on by leaders in Kindergarten-Primary Education from up and down the State.

The closing event of the convention was the Get-Together Luncheon at the Fairmont Hotel, where addresses were given by Superintendent Joseph M. Gwinn, San Francisco, Superintendent H. B. Wilson, Berkeley, and Professor Randolph, Department of Education, University of California.

The convention gave opportunity for many happy groups to meet socially, making it memorable not only from the inspirational and practical viewpoint but socially as well.

New officers were elected to take office the second Saturday in January:

President—Julia L. Hahn, San Francisco.

Recording Secretary—Rose Sheean, Sacramento.

Corresponding Secretary—Lavina McMurdo, San Francisco.

Treasurer—Ethel Van Duessen, Los Angeles.

The full list of vice-presidents, elected by the sections, is not yet at hand.

HELEN L. GREENSFELDER,
Chairman,
Publicity Committee, C. K. P. A.

THE READER'S GUIDE

A SCIENTIFIC STUDY OF DELINQUENCY

In the long run the books that repay reading are the source books, genuine reports of first-hand knowledge and experience. Burt's *The Young Delinquent* [1] is such a book. The author is a professor in the University of London and an employee of the London County Council, already known to many Americans by his *Mental and Scholastic Tests*. His latest book is the first of a projected series of three dealing with the forms of subnormality met with in the young.

This volume has to do with moral aberrations and covers not only juvenile crime but cases of naughtiness generally. Indeed the author's contention is that we should recognize that the unusual cases are after all only extreme examples of general tendencies. His discussion throughout deals with causes and possible remedies. The treatment is at once scholarly and readable. A wealth of information is presented in most usable form, so that the book belongs in the category of the indispensable works that principals and teachers should be familiar with.

THE INFERIORITY-FEAR COMPLEX

From another Englishman comes a fresh attempt to apply psycho-analysis to education.[2] Though a professed admirer of Freud, Mr. Morton finds the root troubles of childhood not in sex but in what he calls the "inferiority-fear complex." The author makes use of numerous illustrations, in which teachers will no doubt recognize types of disciplinary cases with which they have been called upon to deal. Whether one accepts all of the author's explanations of the causes of unacceptable conduct in children or not, he will find much help in the remedies suggested.

THE WINNETKA BOOK LIST

To the question, "What should children read?" Superintendent Washburne and Miss Vogel of Winnetka, Illinois, give the answer most scientifically determined. Under the auspices of the American Library Association and with the aid of funds provided by the Carnegie Corporation, these workers carried on an investigation to determine what books children of given ages and reading abilities actually read and like. Eight hundred teachers in various cities were enlisted, a questionnaire was distributed, the Stanford paragraph test in reading was administered, and the results were subjected to statistical treatment. A selected group of children's librarians passed upon the literary qualities of the books in the proposed list.

The outcome is a neat volume of nearly three hundred pages containing an account of the investigation, a list of books by grades, the same list by children's ages, and a comprehensive subject and author index.[3] The work is obviously authoritative. No such thoroughgoing attempt to survey children's voluntary reading has hitherto been made. Two facts strike the reviewer at once. The first is that the titles in the list are graded higher than has been the custom. This confirms the conclusions of Cavins and other investigators who have declared that there is a tendency to offer children books that

[1] *The Young Delinquent.* By Cyril Burt. D. Appleton & Co., 1925.
[2] *Childhood's Fears.* By G. F. Morton. Macmillan Co.
[3] *Winnetka Graded Book List.* By Carleton Washburne and Mabel Vogel. Chicago: American Library Association, 1926.

are too mature for them. The second point is that the list practically begins with the fourth grade. This seems unfortunate. The development of voluntary reading in the primary grades is one of the most hopeful aspects of modern reading method. Guidance here would have been very helpful.

The value of the list would have been increased by the inclusion of a librarian's comment on the character of each book. True, such comments can generally be found elsewhere, but some inconvenience will be attached to the effort of locating. A supplementary study in which the actual features and characteristics of the books which have commended themselves to children and should be looked for would throw added light. So would a similar study of children's preferences among books obtained entirely apart from the schools. The list as it stands reflects clearly the influence of the supplementary reading lists in the schools.

The work was neatly and cleverly done and speaks volumes for the organization which Mr. Washburne has built up at Winnetka.

MAINSPRINGS OF MEN

Human nature being pretty much the same the world around, educators will find much to ponder in Whiting Williams' latest account of his observations among working people.[4] Taking jobs as a common laborer in mills and mines both in this country and in England, he sought to learn what motives actually operated among his fellows. His conclusion may be summed up in the phrase, "to be thought worth while." No doubt pupils and teachers too are stirred with the same desire. A study in schools as concrete and interestingly presented as this of Williams would be appreciated.

ADMINISTRATION OF CONSOLIDATED SCHOOLS

Messrs. Almack and Bursch estimate that there are at least 16,000 consolidated and village schools in the United States and argue that such schools present problems of organization and management different from the same type of problems in city schools. There is no doubt much truth in their contention. Certainly no group of schools is more deserving of attention.

In a volume of 466 pages,[5] these two writers discuss such problems as: working with the school board, finances, office management, teaching staff, transportation, daily program, health and safety, play, and supervision. The latter is passed over lightly with the explanation that the matter has already been sufficiently attended to in Professor Cubberley's companion work, *The Principal and His School*. This seems to the reviewer a mistake, though the volume is indeed large enough as it is.

The work is intended particularly for classes in teachers colleges made up of students who will seek positions as principals of consolidated schools. It will serve a useful purpose also as a desk book for principals already in charge of such schools and might well be selected as a text for discussion in round tables organized for the purpose. The contents are well organized and the references at the ends of the chapters well selected. County superintendents should see that all of them are made available in the teachers' professional library at the county seat.

[4] *Mainsprings of Men.* By Whiting Williams. Scribner's, 1925.
[5] *The Administration of Consolidated and Village Schools.* By John C. Almack and James F. Bursch. Houghton Mifflin Co., 1925.

IN HONOR OF THORNDIKE

The February number of the *Teachers College Record* is given over to articles and an annotated bibliography compiled and arranged in honor of Professor E. L. Thorndike, who has just completed twenty-five years of service as a professor in Teachers College, Columbia University. A brief sketch of Professor Thorndike's life is followed by personal appreciations from Dean Russell and Professor Cattell. The classified bibliography covers the years 1898-1925 inclusive and contains nearly three hundred entries. The closing pages of the number are devoted to brief tributes from colleagues and students of Professor Thorndike, in which the main features of his work are passed in review.

A NEW CHILD WELFARE MAGAZINE

In January, the Union Internationale de Secours aux Enfants, with headquarters at Geneva, began the publication of a new magazine devoted to the care and training of children with the title, *Revue Internationale de l'Enfant*. The first number contains editorials and articles in French, German, and English, with annotated reviews in these languages. The new magazine is not merely an educational magazine but will appeal to physicians and child welfare workers as well. The annual subscription price is 10 francs, Swiss.

SIGNIFICANT ARTICLES

THE VALIDITY OF THE RATING OF TRAITS

A number of attempts have been made to arrange scales for the rating of traits of character. In the February number of *Educational Administration and Supervision* appears a study of such ratings by S. P. Nanninge of the State University of New Mexico. A group of thirty pupils in departmental work were rated in fifteen traits by the five teachers who had charge of their work. Each teacher was provided with definite directions. The results of the ratings were subjected to statistical treatment with the outcome that there was little agreement discovered. The author concludes that the inconsistencies and lack of agreement in the ratings were so great as to cast doubt upon the use of such rating schemes in determining the progress of children.

TEACHING PUPILS HOW TO STUDY

An interesting investigation into the problems of classroom teachers has been carried on by a committee of the Allegheny County Education Association under the chairmanship of Mr. Ernest C. Noyes. In the *Pennsylvania School Journal* for February, Mr. Noyes reports the results of an investigation of the topic, "How to Teach Pupils to Study and to Think." Four different forms of investigation were adopted: correspondence with foreign educational authorities; a circular letter addressed to teacher training institutions in Pennsylvania; two controlled experiments; and an examination of professional literature. The committee summarizes its conclusions by suggesting that the teacher must:

1. Understand the process of thinking.
2. Stimulate pupils to think by revealing problems about which they will want to think.
3. Guide and assist them in the different steps involved in thinking but make them do the work.
4. Provide from the primary grades up an abundance of carefully graded practice in organizing material.
5. Adapt this instruction to the needs of individuals.

THE KINDERGARTEN CURRICULUM

Curriculum making has reached a very advanced stage in Denver. Among the latest achievements is the preparation of

a kindergarten curriculum which is reported in *Kindergarten and First Grade* for March by Superintendent Newlon and Deputy Superintendent Threlkeld. The article is by way of a supplement to an article published in January in the same journal. The present outline shows the activities of the children as carried into the community and into the teaching of health. Attention is given to the trades common in an average neighborhood, to the national holidays, and to nature study. Among the outcomes hoped for are increased vocabulary, command of number symbols, and gain in social helpfulness. The curriculum is presented in the form of parallel columns after the fashion of "A Conduct Curriculum" by Burke and others, the four headings being: Social Activities, Materials, Outcomes, Methods.

STANDARDS FOR LIBRARY SCHOOLS

The American Library Association has established a school for librarians and recently invited Professor W. W. Charters to appear before its Board and explain the technique of job analysis as a basis for making a curriculum for the new school. A summary of Professor Charters' address appears in *American Education* for February. He illustrated his method by referring first to spelling and then to pharmacy. In the latter case, beginning with the task of filling prescriptions, the investigating committee asked, "What does the pharmacist need to know in order to fill prescriptions?" The answer was found by examining more than 17,000 prescriptions. This gave a clear picture of what it is the pharmacist has to know. An analysis of the job of the librarian should be made in the same manner.

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The Word Builder. By Nina Joy Beglinger and Belle A. MacKinnon. New York: Scribner's, 1926. Pp. 152.

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A Diagnostic Study of the Teaching Problems in High-School Mathematics. By William D. Reeve. Boston: Ginn & Co., 1926. Pp. 117. $.84.

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Vocational Guidance and Counseling. By Alanson H. Edgerton. New York: Macmillan Co., 1926. Pp. 213.

Uncle Tom's Cabin. By Harriet Beecher Stowe. Introduction by Francis P. Gaines. Modern Readers' Series. New York: Macmillan Co., 1926. Pp. 432.

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Les Trois Petits Mousquetaires. By Emile Desbeaux. Edited by Suzanne Roth. New York: Allyn & Bacon, 1926. Pp. 208. Illus. $.80.

Palgrave's Golden Treasury. Edited by A. B. DeMille. New York: Allyn & Bacon, 1926. Academy Classics. Pp. 629. Illus. $1.00.

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University of Illinois Bulletin, Educational Research Circular No. 40: *Adaptation of Subject-Matter and Instruction to Individual Differences in the Elementary School.* By Pedro T. Orata. No. 41: *Modifying Technique of Instruction for Gifted Children.* By M. E. Herriott.

University of Illinois Bulletins, 1925: Vol. XXIII, No. 7, *The Assignment of Lessons,* by Charles W. Odell. No. 15, *Appreciation of Latin,* by Henry W. Prescott et al.

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